

## **Historic, archived document**

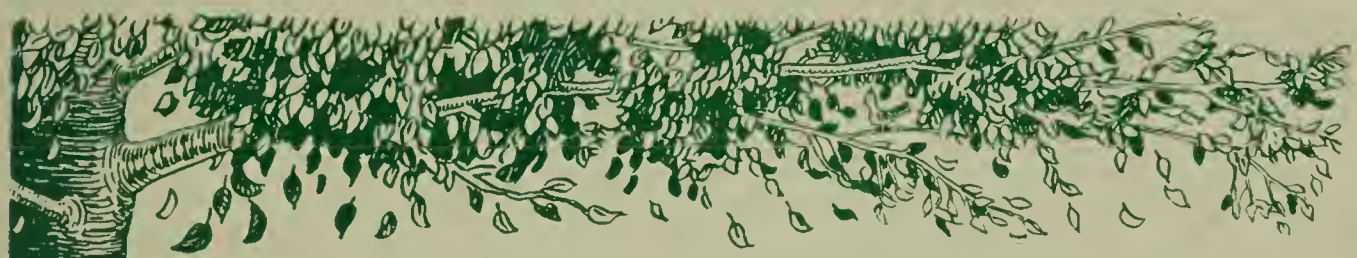
Do not assume content reflects current scientific knowledge, policies, or practices.



63.05

1934

MAR 9 1934  
U. S. DEPT. OF AGRICULTURE



CATALOGUE

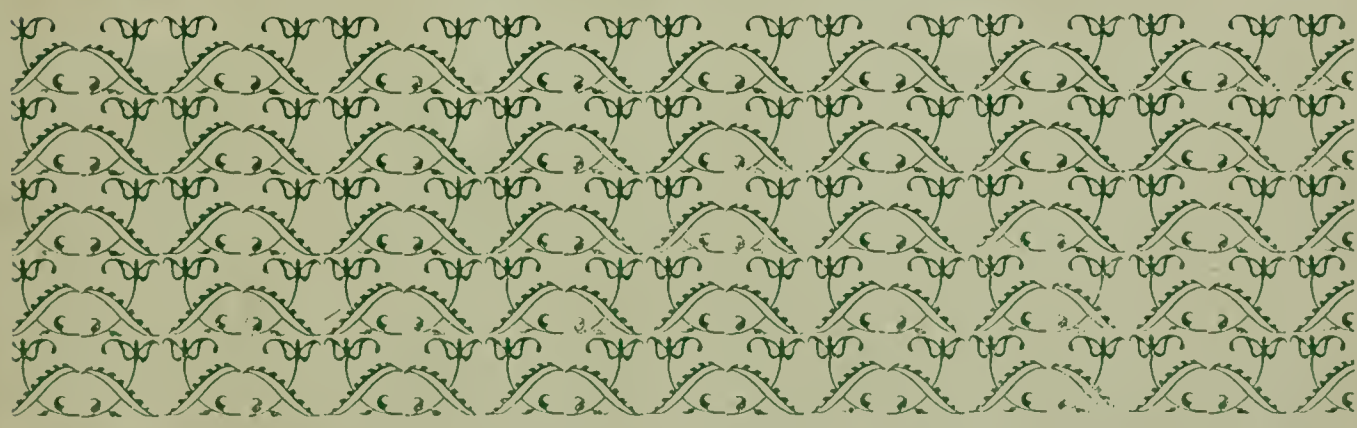
*of*

# LIEFGREEN'S SEEDS

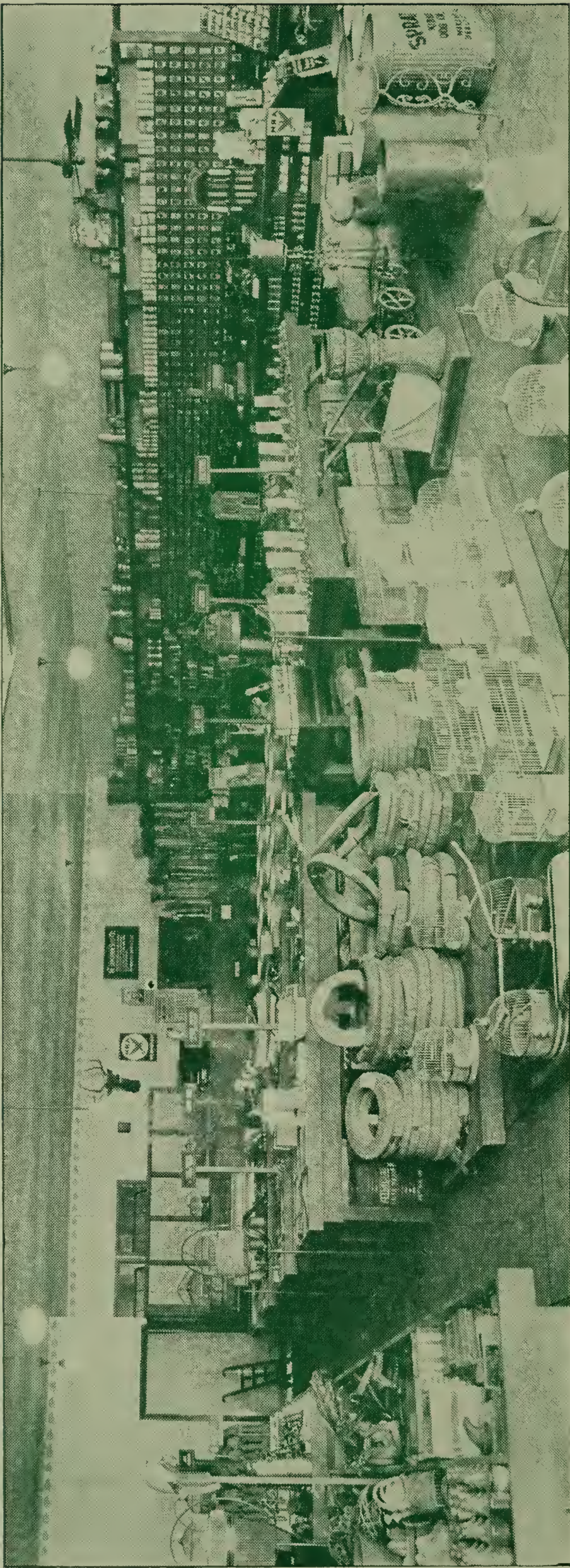
VEGETABLE  
SEED TRIALS  
HORTICULTURE Number 4

LIEFGREEN  
SEED CO.

339 W. VAN BUREN,  
PHOENIX, ARIZONA.







A partial view of our retail store at 339 West Van Buren Street. This store houses a full stock of seed adapted to Arizona conditions. We also carry a full stock of side lines for the farmer, gardener, nurseryman and the home garden. A like space in the rear houses a complete stock of Field seeds, Fertilizers, Insecticides, poultry feeds, sprayers, dusters, etc.

**Non-Warranty.** The Liefgreen Seed Co. gives no warranty, express or implied, as to the description, quality, productiveness, or any other matter of seeds, bulbs, plants or trees they send out, and they will not be responsible in any way for the crop.

DOMESTIC PARCEL POST RATES				
On Seeds, Plants, Bulbs, Roots, Books, Tools, etc., within the U. S. and Possessions. Weight Limit 70 lbs. Local Del. 1st pound 7c; each add. 2 pounds 1c				
First Zone, Phoenix and within 50 miles of Phoenix	Second Zone, Phoenix within 50 to 150	Third Zone, " 150 to 300	Fourth Zone, " 300 to 600	Fifth Zone, " 600 to 1,000
600 to 1,000	1,000 to 1,400	1,400 to 1,800	all over 1,800	
8c	8c	9c	10c	11c
12c	14c	15c		
Additional Pound or Fraction	1.1c	1.1c	2 c	3.5c
				5.3c
				7 c
				9 c
				11 c



## LAWN SEED

Success in lawn making requires first of all GOOD SEED. Our Lawn seeds are thoroughly cleaned and are tested for purity and germination. When you buy LIEFGREEN'S LAWN GRASS SEED you avoid disappointment.



A Beautiful Home on N. Central Ave., Phoenix, Ariz.

### WINTER LAWN

**DIRECTIONS FOR PLANTING**—First level the ground thoroughly and pulverize the soil. Enrich with our Lawn and Garden Fertilizer at the rate of 100 pounds to 3000 square feet. Scatter the seed evenly over the surface at the rate of 1½ to 2 pounds to 10x10 feet for Australian Rye Grass; one pound to 10x20 for Blue Grass; one pound to 500 square feet for Bermuda Grass, and one pound to 2000 square feet for White Dutch Clover when planted with other grasses. After sowing spread a light mulch of fine barnyard fertilizer over the surface. The mulch will quicken germination and prevent the soil from crusting. Water carefully and regularly with a fine spray, never allowing the surface to dry out until the grass is up. Plant Rye Grass, Blue Grass and White Clover from September 1st until early Spring and Bermuda Grass during the Summer months.

### AUSTRALIAN RYE GRASS

An extremely hardy and the most popular Winter lawn grass in the Salt River Valley and similar climates. Our seed is of the highest germinating quality, thoroughly re-cleaned and sure to please. Lb., 15c; 10 lbs., \$1.20; 25 lbs., \$3.00; 50 lbs., \$5.00; 100 lbs., \$10.00. Write for prices on larger quantities.

### KENTUCKY BLUE GRASS

Fancy, re-cleaned seed of tested quality. Used for Summer lawns in the higher altitudes and mountain districts and in the warmer sections for Winter lawns. Lb. 35c; 10 lbs., \$3.00; Write for quantity prices.

### BERMUDA GRASS

Used exclusively for Summer lawns in the Salt River Valley and similar climates. We carry a very selected grade of seed, thoroughly re-cleaned, thereby eliminating the undesirable weed seeds. Lb., 30c; 10 lbs., \$2.50.

### WHITE DUTCH CLOVER

Strictly first-class seed, absolutely clean and pure and of the highest quality. Makes a very attractive lawn when mixed with Winter lawn grass. Lb., 55c; 10 lbs., \$5.00. Write for quantity prices.

**RED TOP (Agrestis Alba)**—A fine-bladed grass that is often used with Rye Grass and Kentucky Blue Grass for golf courses and lawn purposes.

Above Prices F. O. B. Phoenix



Also used for pasture grass in the higher altitudes. For pasture, sow 15 pounds per acre. Lb., 30c; 10 lbs. \$2.50.

**POA TRIVIALIS**—Used for golf courses, putting greens and fairways and very satisfactory for lawns in shady places. Leaves are narrow and flat. Lb., 50c; 10 lbs., \$4.50.

**SEA SIDE BENT** (*Agrostis Maritima*) This is a true creeping bent, and makes a very smooth, uniform lawn, used primarily for putting greens in this section. You will find, however, several successful lawns in the Salt River Valley grown from Sea Side Bent. Our stock of Sea Side Bent is carefully re-cleaned and is extremely pure and free from weed seeds. 1 lb., \$1.25; 10 lbs., \$11.50.

Above Prices F. O. B. Phoenix.

## ASPARAGUS—*Esparrago*

**CULTURE**—Soak seeds twenty-four hours before planting. Sow in February and March in rows, covering seed about one inch. The following Winter transplant to rows three or four feet apart and a foot apart in the rows, with at least six inches of covering. Asparagus prefers light loamy soils.

**PALMETO**—Light green; very popular. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., \$1.00; 10 lbs., \$9.00.

**SELECTED MARY WASHINGTON**—A new Giant rust-proof variety. Pkt., 5c; oz., 40c;  $\frac{1}{4}$  lb., \$1.25; 1 lb., \$3.75.

## ARTICHOKE—*Alcachofa*

**LARGE GREEN GLOBE**—The favorite garden variety. Pkt., 10c; oz., 60c;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$6.00.

## BEANS—*Frijoles*

ASK FOR QUANTITY PRICE

We Can Always Supply Any Quantity for Large Plantings.



Full Measure

**CULTURE**—For a Spring crop plant in February, March and April, according to the location. For Fall crop, plant in August and early September. Beans enjoy a well-drained loamy soil. Irrigate Beans only when needed and do not flood the vines. Cultivate frequently and before the soil has a chance to crust. Plant Bush Beans about three inches apart in three-foot rows at the rate of about one pound to 100 feet of row and from 75 to 100 pounds per acre. Plant Pole Beans at the rate of one pound to 200 feet of row and about 40 pounds per acre. Write us for special quantity prices.

### BUSH BEANS

**Full Measure.** This excellent variety is fast becoming popular with our gardeners. Pods are somewhat like stringless Green Pod but longer and more slender, about 5 inches long, of splendid quality and entirely stringless. Pkg., 5c; 1 lb., 35c; 10 lbs., \$3.00.

**BURPEE'S STRINGLESS GREEN POD**—Best green pod variety—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

**IMPROVED BLACK WAX**—Bush Variety—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

**IMPROVED GOLDEN WAX**—Bush Variety—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

Prices Listed are Postpaid

**POLE BEANS**

**KENTUCKY WONDER**,—Brown Seeded—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

**LIMA BEANS**

**BURPEE'S IMPROVED BUSH LIMA**—Pkt., 5c; 1 lb., 35c; 10 lbs., \$3.00.

**LARGE LIMA**—A pole variety, large seeded—Pkt., 5c; 1 lb., 35c; 10 lbs., \$3.00.

**BEET—*Betabel o Remolacha*****TABLE BEETS**

**CULTURE**—In the warm sections of Arizona Beets may be planted from August 1st until May 1st. In the higher altitudes planting may commence as soon in the Spring as weather conditions will allow. One ounce of seed will plant from 50 to 75 feet of row and six to eight pounds are required per acre. Plant in rows 18 to 24 inches apart and thin to three or four inches in the row. Cover the seed one inch deep and firm the soil after planting. Beets enjoy a light, rich, loamy soil and frequent cultivation is necessary for rapid and tender growth. Ask our advice for the proper fertilizer to use.

**EARLY WONDER**—A very fine market and table beet.

**DETROIT DARK RED**—This is a fine main crop all purpose beet.

**CROSBY'S EGYPTIAN** — The extra early money maker for market growers.

**EARLY BLOOD TURNIP**—A very fine strain.

**ALL BEETS** priced at Pkt., 5c; Oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00; 10 lbs., \$8.50.



Early Wonder Beet

**STOCK BEETS**

**CULTURE**—Sow seed one inch deep in drilled rows eighteen inches to three feet apart, thin plants to ten inches apart in the row. About eight pounds is required per acre. As Beets germinate slowly, the seed should be planted in moist soil.

We carry the following favorite varieties of stock and Shgar Beets, Mammoth Long Red, Golden Tankard, Giant Half Sugar Beet, White Klein Wanzleben—Pkt., 5c; oz., 10c; lb., 60c; 10 lbs., \$5.50.

**SWISS CHARD—*Foliage Beet***

**LUCULLUS**—Culture, same as Beets. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., 85c; 10 lbs., \$8.00.

**BRUSSELS SPROUTS—*Berza de Bruselas***

**IMPORTED HALF DWARF PARIS MARKET**

Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., 90c; 1 lb., \$2.75.

Plant LIEFGREEN'S Superior Vegetable Seed

Prices Listed are Postpaid.



## BROCCOLI GREEN SPROUTING—*Italian*



A new member of the Broccoli family to be used in this country. The edible portion differs from other Broccolis in use in that the flower heads are borne on long stems which are cooked and eaten along with the flower and are of a very mild flavor having none of the distinct cabbage flavor so common in this family of plants.

**CHRISTMAS CALABRIA** is imported from Italy as the best obtainable. Plant and care for as the other Broccolis or Cauliflower. Pkt., 5c; oz., \$1.65;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$6.50.

## CABBAGE—*Col Repollo*

Good Seed is of the utmost importance in all crops, and no doubt has a greater effect on the final outcome of the Cabbage crop than any other. Do not take any chances by using poor seed. Seed taken from selected heads grown under proper conditions will repay you many times at harvest for its extra cost. In buying our strains of Cabbage you take the first step in the right direction.

**CULTURE**—In the warm sections of Arizona seed should be planted during July and August in shaded beds. Make high shade with covering of cheesecloth or burlap. Transplant to the field in three foot rows. Small heading varieties should be spaced about twelve inches apart and larger headings varieties eighteen inches apart. The soil should be kept moderately moist and well drained and deep cultivation should be practiced. Six ounces will produce plants for one acre.

**EARLY WINNIGSTADT**, Imported—One of the best early sorts and an old favorite everywhere. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb. \$2.50.

**DANISH BALL HEAD or HOLLANDER**, Imported—The hardiest round headed Cabbage in cultivation. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20; 1 lb., \$3.50.

**EARLY JERSEY WAKEFIELD**, Imported—Grows a small pointed head like the Winnigstadt. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

**EARLY FLAT DUTCH**, Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00; 1 lb., \$3.00.



**CABBAGE**—Select Golden Acre

**Golden Acre Cabbage.** One of the earliest varieties of cabbage. It is dwarf in habit; resembles the Copenhagen Market Cabbage but smaller heads, averaging  $2\frac{1}{2}$  to 3 pounds in weight. Due to its small size it can be planted 12 to 14 inches apart in the row. Our seed is an extra fine strain. Pkg., 5c; Oz., 40c;  $\frac{1}{4}$  lb., \$1.35; 1 lb., \$4.00.

**COPENHAGEN MARKET**—Our seed of this valuable new early Cabbage comes to us direct from Denmark. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20; 1 lb., \$3.50.

**RED DUTCH**—Heads of deep color and very solid. Excellent for cold slaw and for pickling. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20; 1 lb., \$3.50.

**CHINESE CABBAGE. Pe-Tsal**—Grow it the same as you would lettuce. Transplant to 12 inches apart. Our seed is the genuine Chinese imported. Boiled with beef or pork, it is excellent, having a more pleasing flavor than Cabbage. It is tender and crisp, blanches perfectly and is equally good raw or cooked. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20; 1 lb. \$3.50.

Prices Listed are Postpaid



## COLLARDS—*Col*

**CULTURE**—Similar to Cabbage, but does not produce a head. Used as a pot herb like Kale and also desirable as greens for poultry or rabbits. The same culture is applied as to Cabbage except spacing. Plant 15 inches apart in three-foot rows.

**TRUE GEORGIA**—A strong growing variety with light green leaves. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

## CELERIAC

or TURNIP ROOTED CELERY

**CULTURE**—Nearly the same as Celery. A form of Celery grown for its fleshy roots.

**GIANT PRAGUE**—Produces large smooth roots with few side roots. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.20; 1 lb., \$3.50.

## CELERY—*Apio*

In Southern Arizona, where we experience hot, dry summers, plant seed in cold frames during the month of May. When the plants are strong enough, plant in rows four feet apart and six inches in the rows. Later the soil should be banked against the plants for bleaching, but this should not be done until a few weeks before harvesting. One ounce of seed will produce about 4,000 plants.

**GOLDEN SELF BLANCHING**—The best Celery in cultivation. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

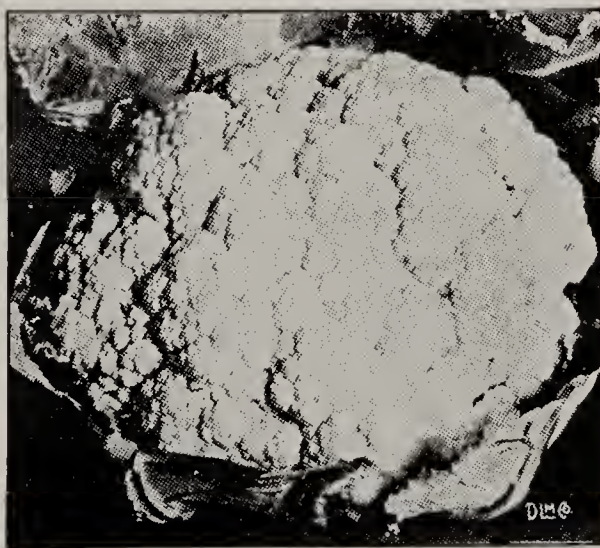
**GIANT PASCAL**—One of the most popular sorts for winter use. Pkt., 5c; oz., 35c;  $\frac{1}{4}$  lb., \$1.00; 1 lb. \$3.00.

## CAULIFLOWER—*Coliflor*

**CULTURE**—Prepare the seed bed carefully, using only rich and thoroughly pulverized soil. Keep the plants in a healthy and rapid growing condition. Broadcast the seed in the seed bed. To mature crop for the December market in Southern Arizona, plant seed in July in shaded beds. For a continuous crop thru-out the winter season plant seed in July, August, September and October. For Northern Arizona, plant in the Spring. When plants are 40 to 45 days in the beds they are ready for the field. Transplant to 24 inches apart in rows 30 to 36 inches apart. Five ozs. of seed will produce plants for one acre.

### SELECT EARLY SNOWBALL

Absolutely the earliest and the surest heading variety of Cauliflower on the market. It is snow-white in color with leaves overlapping the flower. The flower is therefore protected from injury, exposure to frost, rain or heat. It is very essential that good Cauliflower be so protected on account of shipping. Our strain of Snowball is grown by one of the most particular Danish growers and imported direct by us from Denmark. We offer no other variety of Cauliflower as we know this strain to be the best and we cannot honestly recommend any other type to equal it. Pkt., 5c;  $\frac{1}{4}$  oz., 65c; oz., \$2.00;  $\frac{1}{4}$  lb., \$6.00; 1 lb., \$20.00.



CAULIFLOWER—Select Early Snowball

Prices Listed are Postpaid



## CARROT—*Zanahoria*

CARROTS are the most wholesome and nutritious vegetable, easily grown and harvested and relished by most everyone. Carrots grow in most any soil, although a sandy loam plentifully enriched with well-rotted manure suits them best. Sow one ounce of seed to 100 feet of row, three pounds to the acre. Plant from September to May in rows 15 to 18 inches apart. Keep clean by frequent hoeing and weeding.



**CARROT—Danvers Half Long**

**DANVERS HALF LONG**—Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**IMPROVED CHANTENAY** — Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00;

**OX-HEART**—Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

## SWEET CORN—*Maiz Dulce*

**CULTURE**—Plant Sweet Corn in the Spring after all danger of frost is over and when the soil is warm enough to prevent the seed from decaying. Plant four or five kernels in hills 18 inches apart in three-foot rows. Cultivate after each irrigation until stalks shade the ground. Do not allow the soil to become too dry at any time. The

nature of your soil, whether heavy or light, will determine the amount of water necessary. One pound of seed will plant 200 to 300 feet of row or from six to ten pounds per acre, depending on the size of the seed. June Corn and Hickory King may be planted in June, July and August, while Sweet Corns should be planted in early Spring and again in August and September. Our Corn seed is from the very best selected stock and you can always depend on receiving seed of the highest germinating quality. Write us for quantity prices.

**IMPROVED GOLDEN BANTAM**—Pkt., 5c;  $\frac{1}{2}$  lb., 20c; 1 lb., 35c; 10 lbs., \$2.50.

**COUNTRY GENTLEMAN**—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

**OREGON EVERGREEN**—Pkt., 5c; 1 lb., 30c; 10 lbs., \$2.50.

**SELECT ADAMS EARLY**—Pkt., 5c; 1 lb., 25c; 10 lbs., \$2.00.

100-lb. Price on Application

## FIELD CORN

FOR ROASTING EARS AND ENSILAGE

**SACATON JUNE**—Lb., 15c; 10 lbs., \$1.50—Ask for Quantity Price.

**REID'S YELLOW DENT**—Lb., 15c; 10 lbs., \$1.50—Ask for Quantity Price.

**HICKORY KING**—Lb., 15c; 10 lbs., \$1.50—Ask for Quantity Price.

## POP CORN

**WHITE RICE**—A popular and productive variety. The kernels are fine, white, and the ears are from four to five inches long. Large Pkt., 5c;  $\frac{1}{2}$  lb., 15c; 1 lb., 25c; 10 lbs., \$2.00.

For Corn Worm use **LEAD ARSENATE**.

Prices Listed are Postpaid



## CUCUMBER—*Pepino*

**CULTURE**—Plant Cucumbers in the Spring as soon as all danger of frost is over. If you are located in light frost areas planting may be made two to four weeks earlier and receive the full benefits of the early market prices. In the Salt River Valley and similar sections plantings are also made in the Fall, usually August and September. Plant six to ten seeds one inch deep in hills four feet apart each way. One ounce will plant 50 hills, two pounds to the acre. After all danger of pests are removed and you are sure of your plants, thin out, leaving three of the strongest plants. Give abundance of water and frequent cultivation for the best results. Cucumbers enjoy a light, sandy, rich soil.



### CUCUMBER—Select Early Fortune

	Pkt.	Oz.	$\frac{1}{4}$ Lb.	1 Lb.
SELECT EARLY FORTUNE.....	5c	15c	45c	\$1.25
PERFECTED DAVIS PERFECT.....	5c	15c	45c	\$1.25
EARLY WHITE SPINE.....	5c	15c	45c	\$1.25
EARLY KLONDIKE .....	5c	15c	45c	\$1.25
LONG GREEN .....	5c	15c	45c	\$1.25
BOSTON PICKLING .....	5c	15c	45c	\$1.25
LONGFELLOW .....	5c	15c	60c	\$2.00
LEMON—A new variety, lemon colored	5c	15c	70c	\$2.50

## EGG PLANT—*Berengena*

**CULTURE**—Egg Plant grows exceedingly well in Arizona, as it thrives in warm, dry weather. Sow in hot beds or boxes and transplant when danger of frost is over. Plant two feet apart in four-foot rows. To secure a rapid and continuous growth, water and cultivate frequently. One ounce of seed will produce about 1000 plants.

**BLACK BEAUTY**—The fruits are rich, dark purple, large and symmetrical, maturing a little earlier than our Improved New York Purple but usually not quite as large. Pkt., 5c; oz., 65c;  $\frac{1}{4}$  lb., \$2.20; lb., \$6.50.

**IMPROVED NEW YORK PURPLE**—Large, oval-shaped, deep purple fruits. Pkt., 5c; oz., 65c;  $\frac{1}{4}$  lb., \$2.20; 1 lb., \$6.50.



Black Beauty

Prices Listed are Postpaid.



## ENDIVE—*Escarola o Endivia*

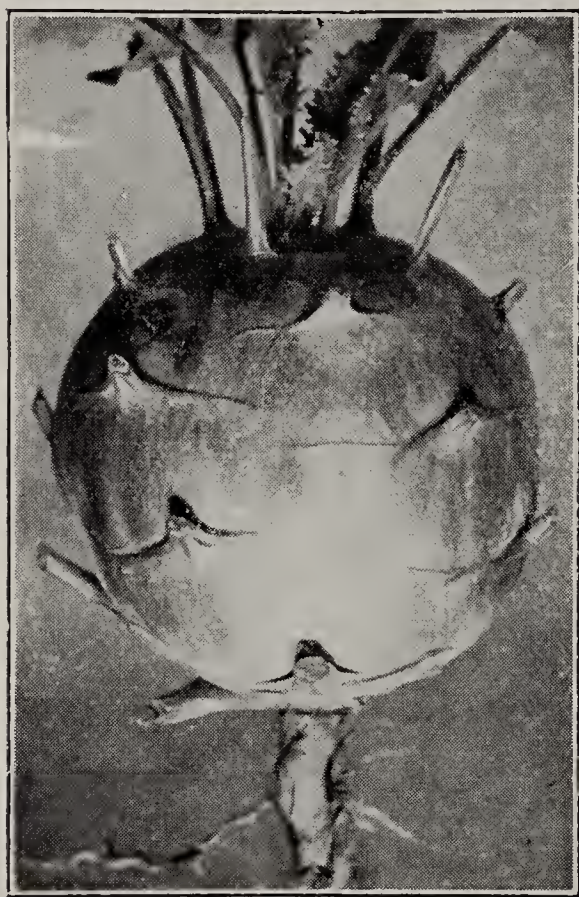
**CULTURE**—Sow seed at any time with the exception of the hot Summer months. Sow thinly in rows 18 inches apart and cover lightly. When about four inches tall they should be thinned out to stand from six inches to a foot apart in the row. This plant grows to perfection and makes a very delicious salad for Winter use. After plants are well grown, gather up leaves and tie at tips into a loose bunch to bleach the inner leaves.

**GREEN CURLED**—A hard, vigorous variety with deep green leaves. This variety is generally preferred as it bleaches to a beautiful golden yellow. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

## KALE or BORECOLE—*Breton Berza*

**CULTURE**—Sow in drills during the Spring and Fall months. Transplant to 12 inches apart in three-foot rows. One ounce required for 100 feet of drill.

**GREEN CURLED SCOTCH**—Grows to a height of two feet or more; leaves are bright green and curled. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; 1 lb., \$1.25.



KOHLRABI

## KOHLRABI—*Colinabo*

**CULTURE**—Kohlrabi is a cold weather plant and should be seeded from early Fall to early Spring, eliminating the hot Summer months. In colder sections plant in early Spring. Plant like turnips and thin to six inches apart. One ounce of seed will produce about 2000 plants.

**EARLY WHITE VIENNA** — Flesh white; early and tender. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

## LEEK—*Puerro*

**CULTURE**—Plant in seed bed or in drills in the field; when large enough transplant or thin out about six inches apart in 18-inch rows. One ounce of seed is required to 150 feet of row.

**LARGE LONDON**—Broad leaves of strong and vigorous growth; very hardy. Pkt., 10c; oz., 35c;  $\frac{1}{4}$  lb., \$1.15; 1 lb., \$3.50.

## GARLIC—*Ajo*

**CULTURE**—Plant in the Salt River Valley and similar climates during October and November. In higher altitudes during the Spring season. Prepare the ground as for onions, separate the sets and plant them in drills four to six inches apart in rows 12 to 18 inches apart, depending on the method of cultivation. Cultivate like onions and when plants turn yellow pull bulbs and dry in the shade. One pound will plant about 50 feet of row. **GARLIC SETS**—25c per pound. Write for quantity prices.

Protect Plants  
from Frost,  
Wind, Rain  
and Insects

# HOTKAPS

For Early  
Yield, Better  
Crops and  
Premium  
Prices

100, \$1.25; 1,000, \$8.50; 5,000 lots, \$8.00 per thousand, F. O. B Phoenix.

Prices Listed are Postpaid with exception of HOTKAPS



## LETTUCE—*Lechuga*

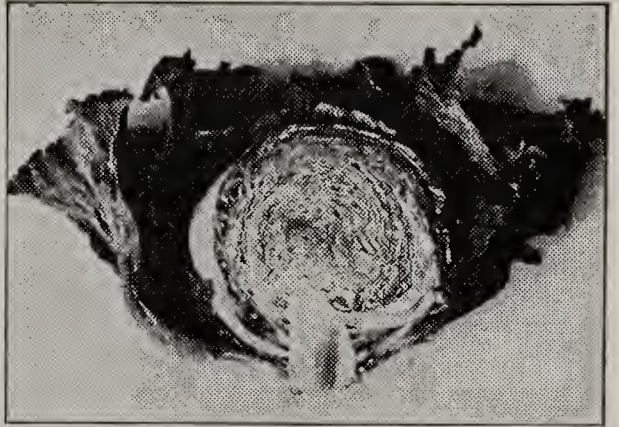
**CULTURE**—Lettuce is best suited to rich, light, loamy soil and should never be planted in worn-out soils. At planting time the soil should be in the best of condition. Sow seed on ridges in rows 18 inches apart and when plants are large enough thin to 10 to 15 inches apart. Run the water in furrows between the ridges and never allow the water to touch the plants.

When Lettuce is planted early in hot ground plant two pounds of seed to the acre. During the Winter season, when the soil is cool, one and one-fourth pounds per acre is plenty.

### HEAD LETTUCE

**NUMBER 12, NEW YORK**—A type of early maturing New York Lettuce that has gained great popularity in the last few years. Matures about 10 days earlier than the regular New York and cuts very evenly in the field. This Lettuce should be planted both for early Fall and Spring markets. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb. \$1.25.

**NEW YORK SPECIAL**—Hardy, uniform heads, wavy light green outer leaves with the center bleached pure white. Crisp, tender and with a flavor that never fails to please. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb. \$1.25.



Liefgreen's Select New York  
No. 12

**ARIZONA WONDERFUL**—A splendid variety for market or home use. Large, crisp, tight heads and a great favorite wherever grown. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.25.

**ICEBERG**—A splendid Head Lettuce for Spring planting. Pkt., 10c; oz. 20c;  $\frac{1}{4}$  lb., 60c; 1 lb., \$1.75.

**HEAD LETTUCE—NEW YORK IMPERIAL NO. 2**—A blight resistant Lettuce of the New York type. Forms a large head with heavy outer leaves and matures later than the New York Special. Excellent for cold weather conditions. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.25.

### LEAF LETTUCE

**PARIS COS or ROMAINE**—Leaves yellowish white, very crisp and tender; a self-blanching lettuce of superior flavor. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; 1 lb., \$1.75.

**DENVER MARKET**—For the family garden plant this variety broadcast on ridges, allowing it to grow thick. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.25.

## WATERMELON—*Zandia*

**CULTURE**—Use our northern grown seed for a successful melon crop. Our Melon seed is selected from the very best types and will grow hardier, larger plants and melons than average seed. Plant seed in a furrow, dropping six seeds every eight or ten feet apart. Cover about two inches deep. As the vines grow, hill the earth about them until the roots are 10 to 12 inches deep. When safely established, thin vines to about two to the hill. Be sure to cultivate after each irrigation as soon as the condition of the soil will permit. Use two to two and a half pounds of seed to the acre.

See our guide for insect pests.

**STONE MOUNTAIN**—A very large oval round shaped melon. Rind dark green and tough. Flesh is deep scarlet and very sweet. A very desirable shipping and home garden melon. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**KLECKLEY SWEET**—A medium size melon, rind very green and flesh deep red. Delicious flavor. An excellent melon for either home garden or shipping. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

Prices Listed are Postpaid



**BLACK SEEDED KLONDIKE**—One of the best Melons grown for home use. The rind is very thin and of a medium green color. The flesh is bright red, tender and deliciously sweet. Our seed is of the genuine strain, as our selections are made from perfect specimen Melons. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c; 1 lb., \$2.00.



#### NEW STRIPED KLONDIKE WATERMELON

**STRIPED KLONDIKE**—A recent introduction. Easily attains a size of 25 or 30 pounds or more, and often carries three or four melons at one time. The rind is a trifle heavier than the regular Klondike and is a very good shipper. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c; 1 lb., \$2.00.

**ANGELENO WHITE SEEDED**—A fine quality early melon nearly round, dark green; flesh bright red and fine quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**ANGELENO BLACK SEEDED**. Much like white seeded Angeleno except in color of seed. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**TOM WATSON**—Another large shipping melon of good quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**PEERLESS or ICE CREAM**—A large oval melon with yellow flesh of good quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**IMPROVED BLACK-SEEDED CHILIAN**—This Melon possesses a rich fruity flavor. Very sweet and has a thin rind. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**IMPROVED WHITE-SEEDED CHILIAN**—A very good Melon. It is extra solid, crisp and sugary—a great favorite with the growers. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**EXCEL**—Large size, extra good shipper and a heavy yielder. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**IRISH GRAY or GENERAL PERSHING**—Color is a yellowish gray. Flesh is a brilliant sparkling red, very sweet and firm. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**GEORGIA RATTLESNAKE**—Standard variety. Oblong; scarlet flesh, crisp and juicy. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**SWEETHEART**—Vines vigorous and productive. Flesh bright red, solid, very tender and deliciously sweet. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**FLORIDA FAVORITE**—An old popular long stripe Melon of good quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**CITRON or PRESERVING MELON**—For preserves. Fruit round and smooth. Is not eaten raw but is used for making clear transparent preserves of peculiarly fine flavor. Flesh white and solid. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

Prices Listed are Postpaid



## MUSKMELON or CANTALOUPE—*Melone* OUR SEED IS PRODUCED FROM CHOICE, CROWN SET MELONS ONLY

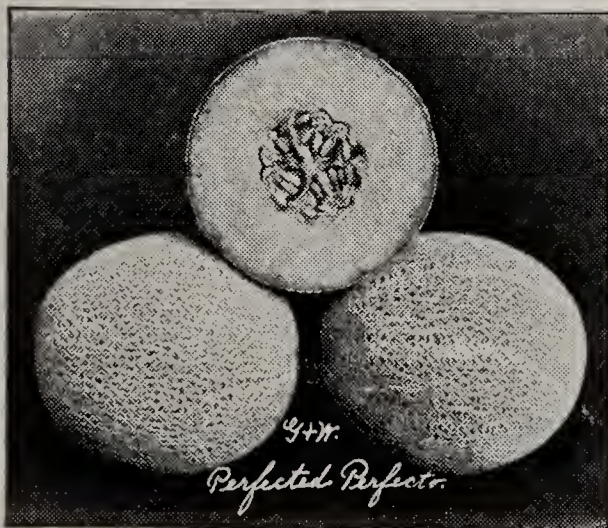
**CULTURE**—Thoroughly soak the soil. When dry enough, plow ten or twelve inches deep. After pulverizing the soil make furrows eight or ten inches deep. Plant the seed in furrows six feet apart each way, using eight to ten seeds to a hill, which will require one and a half pounds to the acre. When paper covers are used, planting in the Salt River Valley generally starts in early February and March. If covers are not used, plant after danger of frost is over. As the plants grow, gather the soil around them until the roots are ten or twelve inches below the surface. Thin out surplus plants as soon as they are hardy and well established. Please remember that the roots are as long as the vine; therefore when working close to the vines let the cultivation be shallow. Always cultivate the irrigating furrow when dry enough so as to conserve the moisture. See Liefgreen's guide for insect pests on melons.



**EARLY H. B. or HALE'S BEST**—An extra early salmon tint of remarkable flavor. Melons are oblong, well netted and attractive. Small seed cavity. Ten days to two weeks earlier than other varieties and yields big. One of the best main crop Melons. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.

**NEW PERFECTED PERFECTO**—Perfected Perfecto runs large and very uniform in size and has a fairly coarse heavy net. The seed cavity averages very small, usually a half dollar will cover it. The rich, dark, orange-colored flesh extends to the rind. The flesh is fine-grained, melting and of excellent flavor, and for keeping and shipping qualities it is unsurpassed. Seed from hand cut, crown set Melons. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.

**IMPROVED PINK MEAT or BURRELL'S GEM**—Flesh thick, salmon in color and fine flavor; rind heavily netted. One of the best keeping Melons grown and a heavy producer. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.



**PERSIAN**—This Melon is popular and much in demand. Very large, running from 8 to 10 inches in diameter. Thick yellow flesh of delightful flavor distinctly different from other Melons. Should be picked while firm but not eaten until the rind will give under pressure. Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00; 1 lb., \$3.00.

**DELICIOUS GOLD LINED ROCKY FORD**—Thick flesh, green in color, with a gold margin next to seed cavity. Has the best flavor of all Rocky Fords. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**HEARTS OF GOLD**—A very popular Melon. A strong, vigorous grower. The Melons run oval to oblong in shape; very uniform in size. Slightly ribbed and heavily netted. Small seed cavity; rich orange colored flesh, finely grained and of excellent flavor. Remains solid for many days after cutting. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.

Prices Listed are Postpaid



**HONEY BALL**—This melon has become very popular. In appearance it is similar to the Honey Dew, but is smaller and runs more uniform. Has a wonderful flavor and preferred sometimes to the Honey Dew. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 60c; 1 lb., \$1.75.

**TIP TOP**—A prime favorite for the home garden or nearby markets. Medium size, deeply ribbed, slightly netted. Flesh is salmon, rich and sweet. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**EARLY LARGE HACKENSACK**—Very early. Good sized melons weighing five to ten pounds each. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.



**MUSKMELON—Tip Top**

## HONEY DEW and CASABA MELONS

**HONEY DEW**—Excellent flavor, good keeping qualities and very prolific. Flesh is light green and sweet as honey. Ready to pull when green lustre has changed to a creamy yellow and ready to eat when an impression can be made with the thumb. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**GOLDEN BEAUTY**—The most popular and the best flavored Casaba Melon grown. Grows from six to eight inches in diameter, is nearly round, slightly pointed at the stem end. The wrinkled skin is a beautiful golden yellow and the rind is very hard. The flesh is pure white and very thick. Pkt., 5c; oz., 20c;  $\frac{1}{4}$  lb., 65c; 1 lb., \$2.00.

**IMPROVED HYBRID**—A variety that ripens late and is a good keeper. Thick flesh of excellent quality. Pkt., 10c; oz., 25c;  $\frac{1}{4}$  lb., 75c; 1 lb., \$2.50.

## MUSTARD—*Mostaza*

**CULTURE**—Very easy to grow. Sow in the Fall and during the Winter and Spring months. Drill in rows and cover lightly. Mustard is not particular as to soil, but a medium heavy soil is best.

**SOUTHERN CURLED**—The true curled leaf variety. Cooks like Spinach and has a very agreeable flavor. Pkt., 10c; oz., 20c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**OSTRICH PLUME**—Is delicious as well as ornamental; the leaves resemble ostrich plumes, hence the name. Pkt., 10c; oz., 20c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**CHINESE GREEN CURLED**—This is a delicious vegetable, being less pungent than the American varieties. Like Spinach, it thrives during the Winter season. Pkt., 10c; oz., 20c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.

## ONIONS—*Cebolla*



Field of Onions Growing for Seed

**CULTURE**—A rich, well drained soil will produce fine Onions. If soil is not well drained it will produce thick necked scallions. A well fertilized sandy loam is the best. In the lower altitudes in Arizona planting starts in September and continues throughout the Fall and early Winter months. Time of planting depends on the variety. Drill Onion Seed in 14-inch rows and irrigate in the furrows between the ridges to avoid

Prices Listed are Postpaid.



flooding the onion, which causes rot, rendering it unfit to ship or keep. Three pounds of seed is required to the acre for dry Onions or one ounce to the 100 feet. For Green Onions or Bunching Onions plant ten pounds per acre. Our Onion Seed is of the highest type as to germination and purity. Consult with us as to what and how to plant and allow us to quote you quantity prices. Ask for prices on Planet Jr. Seeders.

**CRYSTAL WHITE WAX**—A large white Bermuda type Onion that has become very popular. It is very early, very mild in flavor and an excellent shipper and keeper. Our seed is of the best type procurable. Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00; 1 lb., \$3.00.

**YELLOW BERMUDA**—Outer skin is of a pale strawish color. A large flattish Onion with a very mild flavor. Very early. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

**SWEET SPANISH or VALENCIA**—In this Onion you will find all the good features of a perfect Onion. Very mild, sweet flavor, good firm meat and a fine tender texture. Pkt., 5c; oz., 30c;  $\frac{1}{4}$  lb., \$1.00; 1 lb., \$3.00.

**SILVER SKIN**—One of the leading white Onions. A good keeper and shipper. Under good cultivation the average diameter is from four to six inches. The thick skin is a clear silvery white, flesh snow white, sweet and tender. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

**YELLOW GLOBE DANVERS**—A well known early Onion of fine quality. Pkt., 10c; oz., 20c;  $\frac{1}{4}$  lb., 65c; 1 lb., \$2.00.

**GREAT GREEN BUNCHING ONIONS**—Produces the long, tender, sweet green Onions which are so popular on the table of those who enjoy good eating. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

## ONION SETS

**WHITE SILVER SKINS and YELLOW DANVERS**—Lb., 25c; 10 lbs., \$2.00. Quantities not prepaid at special prices.

## OKRA or GUMBO—*Quimbambo*

**CULTURE**—Okra thrives well in Arizona and is a very popular vegetable. Requires a generous supply of water and responds readily to fertilization and cultivation. Plant after all danger of frost is over in drills and thin to twelve inches apart. Sow one ounce to 50 feet of row. To produce really early Okra plant heavily, at least ten or twelve pounds to the acre.

**EARLY DWARF GREEN**—Short pod. Dwarf, stocky growth, heavy bearer. The pods are medium short, greenish color, tender and of good flavor. The most popular variety. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**LONG GREEN**—A very productive variety. Long ribbed pods. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

## PARSLEY

**CULTURE**—Sow in the Fall or early Spring. As the seed is slow to germinate, a light mulch over the seed bed will retain the moisture and hasten germination. Cover lightly. One ounce of seed will produce about 500 plants.

**MOSS CURLED**—Excellent for garnishing and flavoring and very decorative. Leaves are very fine and crisp. Pkt., 5c; oz., 15c;  $\frac{1}{2}$  lb., 35c; 1 lb., \$1.00.



Okra—Dwarf Green

Prices Listed are Postpaid.



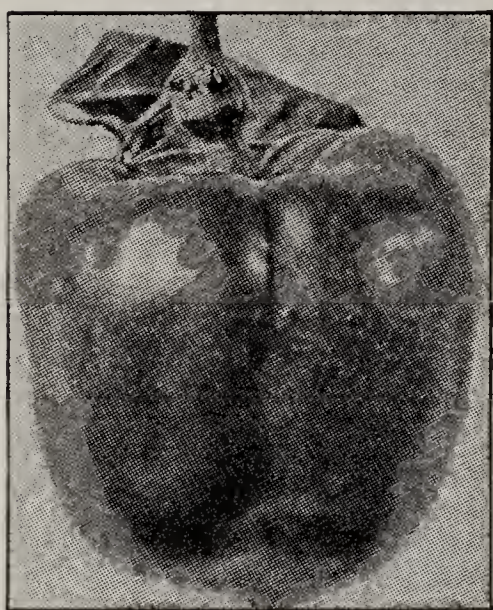
## PARSNIP—*Cheribia*

**CULTURE**—Plant from October to March. Sow in drills in rich soil  $\frac{1}{2}$ -inch deep and 15 inches apart. Cultivate like carrots and thin to four inches apart. One ounce of seed will plant about 100 feet of row; five pounds to the acre.

**HOLLOW CROWNED**—The very best Parsnips, either for table use or for stock. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

## PEPPERS—*Pimento o Chili*

**CULTURE**—Sow seed in hot beds in November, December and January. Transplant to the field when all danger of frost is over unless paper plant protectors are used. Peppers delight in highly fertilized soil and should be kept well watered. Plant 18 inches apart in 30-inch rows. One ounce of seed will produce 1,000 plants or  $\frac{1}{2}$  pound seed to the acre.



Pepper—California Wonder

**CHINESE GIANT**—The ideal stuffing Pepper, of exceptional merit. It is very mild in flavor, grows to a large size and is highly productive. Pkt., 5c; oz., 65c;  $\frac{1}{4}$  lb., \$2.20; 1 lb., \$6.50.

**ANAHEIM CHILI**—Pods about seven or eight inches in length. Because of its agreeable pungency it is one of the most popular Peppers on the market. Pods keep for months when dried, which makes it a good, marketable crop. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**CALIFORNIA WONDER**—It is the best large fruited Pepper in existence, very smooth, heavy, free from creases and wrinkles. Meat thick, tender, and of finest flavor. Pkt., 5c; oz., 70c;  $\frac{1}{4}$  lb., \$2.25; 1 lb., \$7.00.

**FLORAL GEM**—The favorite variety when a small hot pepper is desired for pickling or highly flavored sauces. Pkt., 5c; oz., 85c;  $\frac{1}{4}$  lb., \$2.65; 1 lb., \$8.00.

**PIMIENTO**—Every garden should have a row of this Pimiento. For salad, parboil it to remove the skin. Stuffed and baked, it is superior to any other Pepper. Pkt., 5c; oz., 45c;  $\frac{1}{4}$  lb., \$1.50; 1 lb., \$4.50.

**MEXICAN CHILI**—Popular on account of its extreme pungency. Medium sized and pear shaped. Turns bluish black when dried. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

## PUMPKINS—*Calabasa*

**CULTURE**—Plant in hills 8 to 10 feet apart each way in March and July and August. Drop five or six seeds to the hill and thin out to one healthy plant. Pumpkins, like other vine crops, should be irrigated carefully, not allowing the water too near the main stalk. About  $1\frac{1}{2}$  pounds is required to the acre. Plant plenty of Pumpkins as they make excellent cow and hog feed.

**SMALL SUGAR**—A very popular small variety. The skin is a deep orange yellow and the flesh sweet and fine-grained. Sells better than any other Pumpkin on the local market. Excellent for pies. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; 1 lb., \$1.25.

**LARGE CHEESE**—Large size; reddish orange; flesh thick, fine and sweet. A good keeper. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

Prices Listed are Postpaid.



**JAPANESE PIE**—Nearly solid flesh; the seed cavity being very small, fine-grained, dry and sweet. Taste somewhat like sweet potatoes. They ripen early and are good keepers. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

**IMPROVED YELLOW CASHAW**—A crookneck Pumpkin. Solid, fine and sweet. Keeps well. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.25.

**CONNECTICUT FIELD**—A fine variety for dairy ranches, adding much to the quality and quantity of milk and butter. Excellent keeper. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

## PEAS—*Chicharos o Alverjoa*

**CULTURE**—Plant Peas from September 10 to April 1. Peas are very hardy and will stand a great deal of cold. During cold weather plant seed one to two inches deep in the warmer months plant three to four inches deep. Excessive moisture will rot the seed, so do not irrigate after seed is planted until the plants are well out of the ground. Sixty pounds to the acre is the amount usually used.

Write us for special quantity prices.

Large pkt., 5c;  $\frac{1}{2}$  lb., 15c; 1 lb., 30c; 10 lbs., \$2.50.

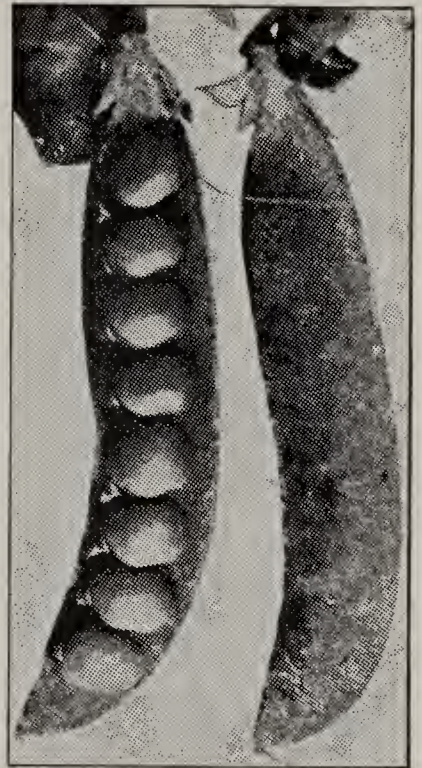
**LAXTON'S PROGRESS.** Early—Regarded by some large users as the best of the large podded early peas. Vine 18 to 20 inches high, pods large of fine color that stands long distance shipping well and are well filled with large peas of finest quality. Plant on good rich land in September.

**DWARF TELEPHONE**—Planted after the Progress, usually in November for a Spring crop. More generally planted by the large growers than any other Pea.

**AMERICAN WONDER**—An early dwarf wrinkled Pea. Especially good for the home garden.

**IMPROVED STRATAGEM**—A very popular late bush variety. Used extensively by the large growers and shippers. The pods are a dark green color and remain firm several days after picking.

**TALL TELEPHONE**—Vines vigorous, growing about four feet high, with large, coarse, light colored leaves and producing an abundance of large pods well filled with immense peas.



PEAS—Laxton's Progress

## RHUBARB or PIE PLANT—*Ruibardo*

**CULTURE**—In the higher altitudes sow the seed from March 1st to July 1st in drills two feet apart. Not very successful in the lower altitudes. In hot, dry climates would recommend planting roots.

**CRIMSON WINTER**—Pkt., 5c; oz., \$1.60;  $\frac{1}{4}$  lb., \$5.00.

## PEANUTS

**SPANISH**—Small variety used for hog feed and oil. Lb., 35c; 10 lbs., \$3.00.

**VIRGINIA BUNCH**—Used for roasting. Lb., 35c; 10 lbs., \$3.00.

## HERBS

Dill  
Anise  
Sweet Basil  
Coriander

Rosemary  
Chives  
Catnip

Borage  
Thyme  
Fennel

Sorrel  
Sage  
Chervil  
Lavender

Pkt., 5c.

Prices Listed are Postpaid



## RADISH—*Rabano*

**CULTURE**—Radishes may be planted most any month of the year in southern Arizona with the exception of the hottest months. They thrive best in light, rich, sandy loam. By planting a long Radish and the small turnip variety at the same time a continuous crop may be had during the entire season. Sow in drills as close as convenient to cultivate. Plant one ounce of seed to 100 feet of drill, ten pounds to the acre.

Price of all varieties, except where noted: Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.



Radish Icicle

**LONG WHITE ICICLE**—The most popular long white Radish. Very early, crisp, sweet and tender. Reaches a length of about six inches.

**EARLY LONG SCARLET**—Long bright scarlet. Very brittle and sweet; matures early.

**WHITE TIPPED SCARLET TURNIP**—This Radish is a table dainty, crisp, tender and sweet. Turnip-shaped, bright scarlet color, with white tip.

**EPICURE**—Scarlet, white tipped. The quickest growing Radish we know of.

**EARLY SCARLET TURNIP**—A handsome scarlet; flavor very mild; crisp and juicy.

**CRIMSON GIANT**—Twice as large as any other turnip-shaped variety. Does not get hollow or pithy; flesh white, solid, crisp; mild-flavor.

**FRENCH BREAKFAST**—An early variety with good flavor and attractive appearance, being olive-shaped of light scarlet tipped with white.

**ROUND BLACK SPANISH**—Black Skin, white flesh and of firm texture.

**JAPANESE WINTER** or **SAKURAJIMA**—A Japanese Radish of large size. Oval in shape, with cream-colored skin and pure white flesh. Usually sliced for table use. The roots are also cooked like turnips, but have no strong taste. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**MIXED RADISH**—A mixture of all the varieties we list. Try this mixture and have them early, medium, late and all sizes.



Radish—Crimson Giant

## SQUASH—*Calabaza*

**CULTURE**—Sow in the Spring after all danger of frost is over and also in the Fall in time to mature a crop before frost. Light, warm soil is best. Plant bush varieties in hills three to four feet apart and vining varieties from six to eight feet apart. Plant about six seeds to the hill and thin out to the three best plants. One ounce will plant about 40 hills of bush varieties and about 15 hills of vining varieties. Two or three pounds is required to the acre.

**GOLDEN HUBBARD**—Similar to green Hubbard except in color, which is a deep orange. Deep golden yellow flesh, fine grained; cooks dry and is of excellent flavor. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**BANANA**—A deservedly popular variety growing 18 inches to 2 ft. long, 6 to 8 inches in diameter, skin, grayish blue; flesh, yellow and fine grained. An excellent table variety without a hard shell. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

Prices Listed are Postpaid



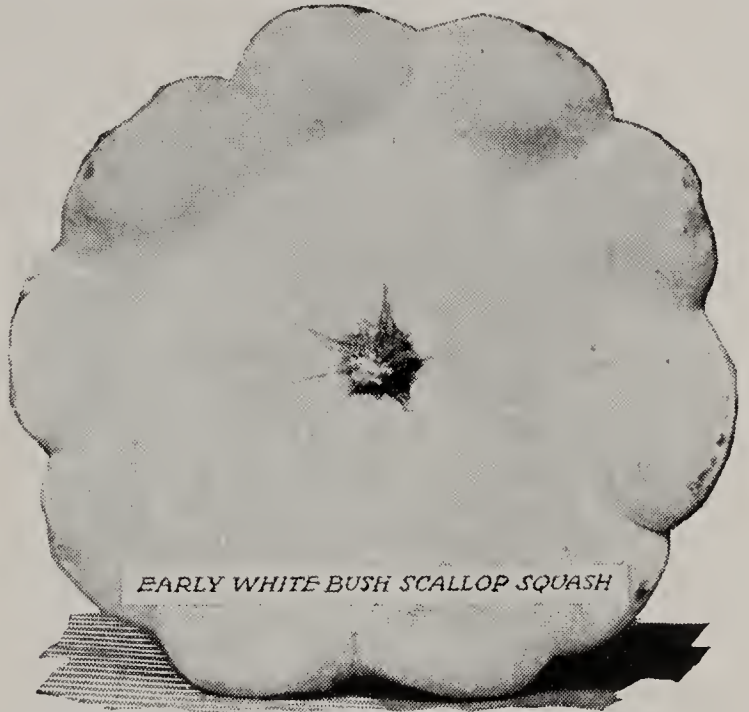
**EARLY WHITE BUSH**

—A very popular Squash because of its earliness and productiveness. Skin and flesh are a light cream color. Our strain of seed is as pure as is possible to grow. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 45c; 1 lb., \$1.25.

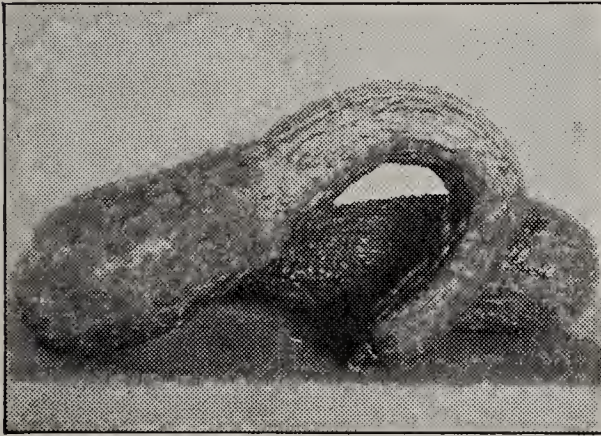
**ITALIAN or ZUCCHINI**

—The variety most favored by market gardeners, is very early, prolific, fruits when immatured a light mottled green, very attractive and of finest quality. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**COCOZELLE** — Another type of Italian Bush Squash much like Zucchini except darker color which is striped light and dark green. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 60c; 1 lb., \$1.50.



EARLY WHITE BUSH SCALLOP SQUASH

**Early Summer Crookneck**

through the winter if stored in cool, dry place. Thick skin of bright yellow color, heavy meat. Excellent for baking, like sweet potatoes, or pie-making. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**EARLY SUMMER CROOK-NECK**—A small crookneck Summer Squash. Skin bright yellow. This is the richest of Summer Squashes. Very early and productive. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**IMPROVED HUBBARD** — By far the most popular hard-shelled Squash. Unsurpassed for baking and for pies. Dark, bronze green skin and flesh is fine-grained, thick, dry and richly flavored. Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.50.

**FORDHOOK**—One of the best late varieties and will keep well

**SPINACH—*Spinaca***

**CULTURE**—Sow in drills 12 to 18 inches apart, and for a succession plant every two weeks. Cultivate often and keep free from weeds. Sow from September 1st to April, using one ounce of seed to 75 feet of row and from 20 to 25 pounds to the acre.

**PRICKLY WINTER HOLLANDIA Broad Leaf**—A splendid Fall and Winter variety. Quick growing, with large green leaves. The leading variety in the Salt River Valley. We import thousands of pounds of this variety from Holland every Fall for Valley growers. Ask for quantity prices. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; 1 lb., 60c.

**BLOOMDALE**—A favorite with market gardeners. Has thick, dark green wrinkled leaves and is very hardy. Very early and one of the best for Fall use. Pkt., 5c; oz., 10c;  $\frac{1}{4}$  lb., 20c; 1 lb., 60c.

**NEW ZEALAND**—A large seeded cut-and-come-again variety. Not planted commercially. One plant will cover a four-foot area. Try a packet for the family garden. Pkt. 5c; oz., 15c;  $\frac{1}{4}$  lb., 35c; 1 lb., \$1.00.

Prices Listed are Postpaid



SPINACH—Prickly Winter Hollandia



## SALSIFY—*Salsifi Blanco* OR VEGETABLE OYSTER

**CULTURE**—Plant during the early Spring months. Sow one inch deep in drills 12 inches apart and thin out to about three inches in the row. The soil should be deep and loose and never allowed to get dry.

**SANDWICH ISLAND**—An improved type and the largest and most delicious Salsify in cultivation. Pkt., 5c; oz., 25c;  $\frac{1}{4}$  lb., 85c; 1 lb., \$2.50.

## TOMATOES—*Tamata*

**CULTURE**—Tomatoes do best on light, warm, rich soil. Sow in hot beds about eight weeks before they are to be set in the field. The time of planting depends on the soil and climatic conditions. If you want early market Tomatoes, we advise covering with Hot Kap Plant Protectors for frost protection. Transplant three to six feet apart in rows four to six feet apart, the distance apart to be governed by the nature of the plants, whether compact, upright growth or of vining habit. Plow and pulverize the soil to a good depth so that the roots may penetrate deeply and avoid the hot surface soil. Use about one-fourth pound of seed for field planting or one ounce of seed for every 2,000 plants in the hot bed.



**SELECT EARLIANA**—The most popular first early variety grown in the Salt River Valley. The plant is very hardy, with light foliage which tends to early ripening. Yields well and the fruit is solid and of fine quality. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**CHALK'S EARLY JEWEL**—Nearly as early as Earliana. Fruit large and of fine flavor. Pkt., 5c; oz., 40c;  $\frac{1}{4}$  lb., \$1.35; 1 lb., \$4.00.

**IMPROVED NEW STONE**—The most popular Summer Tomato. Good size, bright red, solid, smooth and

**TOMATO—Select Earliana**

enormously productive. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**NORTON WILT RESISTANT**—A wilt resistant Stone Tomato that has gained popularity owing to its wilt resistant qualities. Pkt., 5c; oz., 60c;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$6.00.

**LIVINGSTON'S BEAUTY**—A large purple scarlet Tomato producing large fruit of perfect shape. It ripens early, has firm flesh of excellent quality and the seed cells are very small. Pkt., 5c; oz., 60c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**PHOENIX SPECIAL**—A good Summer Tomato. Bright purple scarlet almost globular in shape. Very productive and quite early. Pkt., 5c; oz., 60c;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$6.00.

**PONDEROSA or BEEFSTEAK**—A very large purple Tomato with very few seeds and of excellent flavor. The color is bright red with very firm substantial meat and luscious flavor. Pkt., 5c; oz., 70c;  $\frac{1}{4}$  lb., \$2.35; 1 lb., \$7.00.

**DWARF STONE**—Very erect habit of growth, allowing plants to be set as close as 18x24 inches. Very prolific, smooth and ripens early. Color, bright red. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**DWARF CHAMPION**—Commonly called Tree Tomato. Early, medium large, purplish pink fruit. Pkt., 5c; oz., 50c;  $\frac{1}{4}$  lb., \$1.65; 1 lb., \$5.00.

**MARGLOBE**—The vine is vigorous, resistant to disease, fruit a large, slightly flattened globe, of fine bright color, very firm and meaty and of the very best quality. You can make no mistake in planting your main crop of Marglobe. Pkt., 5c; oz., 60c;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$6.00.

Prices Listed are Postpaid.



**BREAK O-DAY**—One of the earliest varieties. Developed by the U. S. Dept. of Agriculture. Medium size, solid fruit of bright red color. Excellent for the home garden, market and shipping as fruit is of beautiful color and a good shipper. Pkt., 5c; oz., 80c;  $\frac{1}{4}$  lb., \$2.65; 1 lb., \$8.00.

**RED CHERRY**—Small bright scarlet fruits borne in clusters. Pkt., 10c; oz., 75c.

**HUSK or GROUND CHERRY TOMATO**—Immensely productive. The small fruits are enclosed in a husk. Pkt., 10c; oz., 75c.

**YELLOW PEAR**—The leading favorite for preserves. Bright yellow pear-shaped fruit. Rich and distinct flavor. Pkt., 10c; oz., 75c.

## TURNIPS—*Nabo*

**CULTURE**—Turnips are of very easy culture. Sow from September 1st to March 1st, either broadcast in loose loamy soil or in double rows on ridges not too thick. One ounce of seed will plant about 75 feet of row or three pounds broadcast to the acre.

**PURPLE TOP WHITE GLOBE**—The most popular and the most attractive Turnip on the market. Grown almost exclusively by the market gardeners in this section. It is a rapid grower, has pure white flesh and the best flavor of any Turnip grown. The skin is white, with a purplish top. Slow to get pithy and marketable at most any size. Our seed is grown from selected roots and we offer this variety over all others.

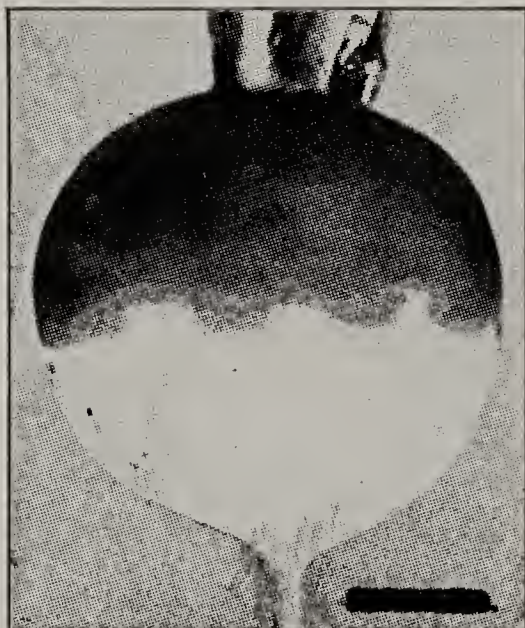
All Turnip and Rutabaga prices:  
Pkt., 5c; oz., 15c;  $\frac{1}{4}$  lb., 30c; 1 lb., 80c.

**PURPLE TOP STRAP-LEAVED**—Quick grower. Flesh very fine grained and sweet flavored.

**WHITE EGG**—An egg-shaped variety for early or late planting. Flesh firm, fine grained, mild and sweet.

**EARLY WHITE FLAT DUTCH**—White flesh, medium size, quick growth.

**GOLDEN BALL**—Round, smooth yellow Turnip of fine quality. Good keeper.



TURNIP—Purple Top  
White Globe

## RUTABAGA or SWEDISH TURNIP

**CULTURE**—Same as for Turnips.

**IMPROVED YELLOW PURPLE TOP**—The popular standard variety, both for stock feeding and for table use. Yellow flesh, solid and sweet.

Above Prices are Postpaid

Use our complete fertilizer 8-9-6 mixture for vegetable and flowers, lawns, trees, shrubs, etc. 5 pounds 40c; 10 lbs., 75c; 25 lbs. \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00 F. O. B. Phoenix.

## VEGETABLE PLANTS and ROOTS

Asparagus Roots

Cabbage Plants

Egg Plant

Tomato Plants

Pepper Plants

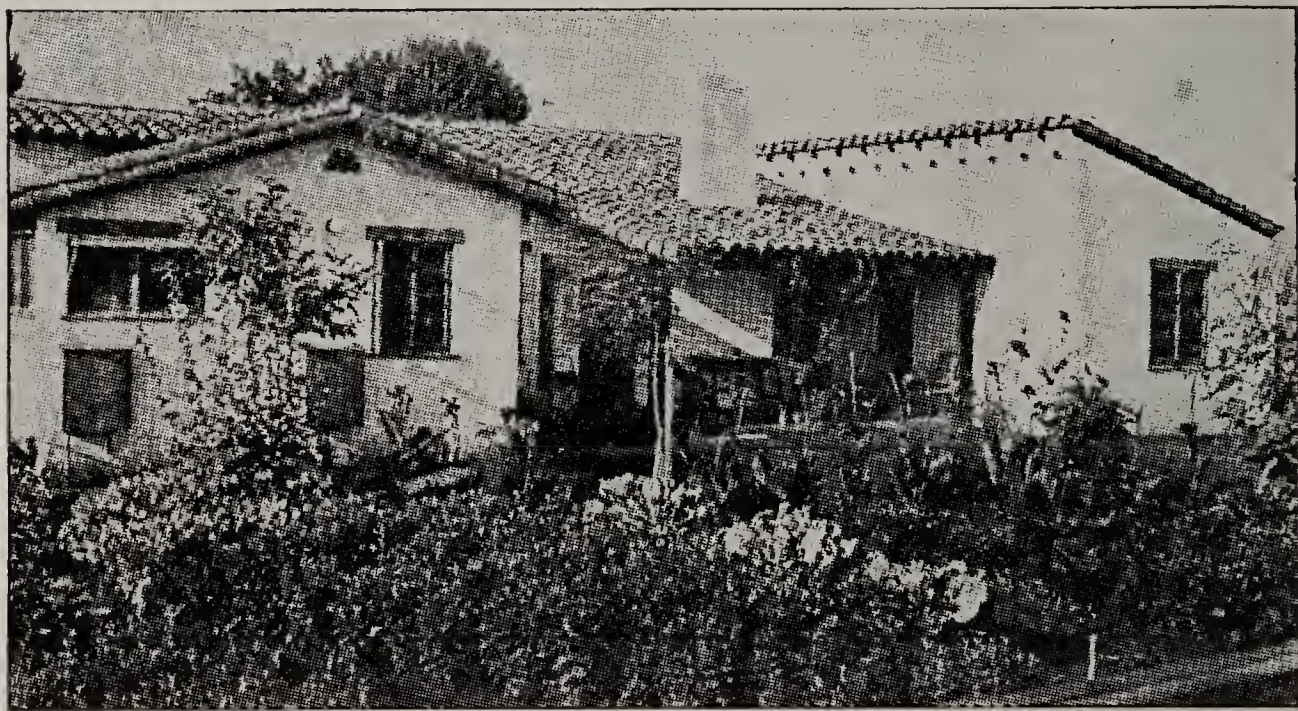
Rhubarb Roots

Cauliflower Plants

*Prices on Application*



## LIEFGREEN'S SUPERIOR Flower Seeds



Flowers beautify the home. They are essential to happiness and the small cost expended for them will bring enjoyment and satisfaction to the purchaser. The flower seeds we offer are the best strains of the best varieties which are thoroughly adapted to our climatic conditions by actual trial tests. We buy the finest quality that money can buy from the most reliable growers, and no home is really complete without a flower bed grown from LIEFGREEN'S Selected Flower Seeds.

Light, rich, loamy soil is best suited to flowers. If the soil is of a heavy nature add sand and barnyard fertilizer and a liberal scattering of air-slacked lime to form a better texture. Prepare the soil as fine and smooth as possible. The depth of planting flower seeds is very important.

Very fine seeds should be planted on the surface and pressed into the soil, then sprinkle over the surface a light mulch of finely sifted manure or silt. This will keep the soil from crusting and aid germination. Medium sized seeds should be planted  $\frac{1}{4}$  to  $\frac{1}{2}$  inch deep, while larger seeds such as Sweet Peas, should go deeper. A light mulch should be spread over all seeds planted, as it is the best method of keeping the soil moist and cool. Water with a fine spray to avoid washing the soil from the seeds. When large enough, thin young plants from 2 to 12 inches apart, depending on the variety. Give them plenty of room to develop, allow plenty of moisture and good drainage and the results will surprise you.



African Daisy

### AFRICAN DAISY

(*Dimorphanthera Aurantiaca*)

This showy annual has become a great favorite on account of its easy culture and beautifully colored flowers. They make a very brilliant ef-

Prices Listed are Postpaid.



fect when used for massing or for borders. Plant during the early Fall and Winter months.

**AURANTICA**—Brilliant Orange. Pkt., 10c.

**HYBRIDS**—Mixed colors. Pkt., 10c.

**ANTIRRHINUM** (Large Flowering Snapdragon) Snapdragons are one of the most valuable and decorative flowers. Can be easily grown from seed; thrive in any soil and bloom freely. Plant in the open in the Fall or Spring months. If cut back during the Summer the plants will bloom for several years. We offer the following colors in the tall Mammoth flowering types: Pure White, Scarlet, Yellow, Bronze, Rose, Pink, Maroon and mixed colors. Mixed, Pkt., 10c;  $\frac{1}{4}$  oz., 30c; oz., \$1.00. Straight color, Pkt., 10c;  $\frac{1}{4}$  oz., 40c; oz., \$1.50.

**AQUILEGA** (Columbine) A hardy perennial of graceful habit, growing about two feet high. The flowers are attractive and beautifully adapted for cut flowers. They may be successfully grown in partial shade. Fall sown seed will bloom the following Spring. Thrives well in Arizona. Double Mixed, Pkt., 15c.

**ASTERS** Sow Asters in boxes and hot beds in January and transplant out doors as soon as weather conditions allow. Asters are better suited to the higher altitudes of Arizona.

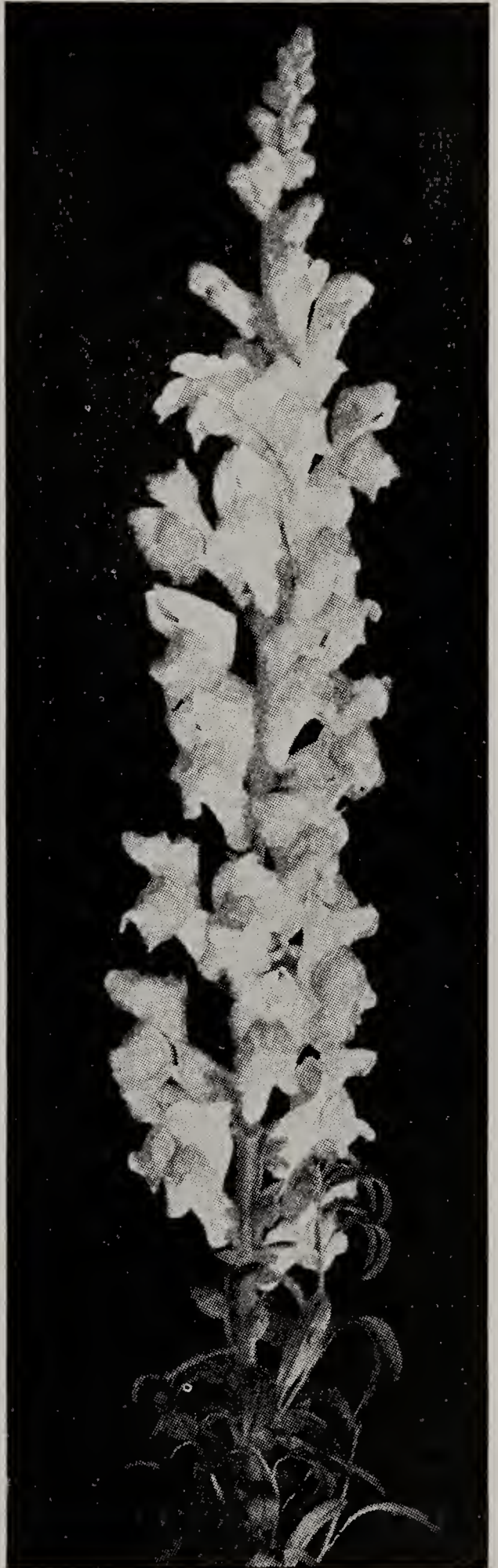
**AMERICAN BEAUTY**—Early Flowering—This is a new type of Aster, exceptionally valuable for its earliness and long flowering season. We have the following colors: Crimson, Lavender, Pink, White and Mixed. Per Pkt., 15c.

**ANEMONE** (Wind Flower) **G I A N T FRENCH SINGLE MIXED**—Easily grown from seed as well as from bulbs. Sow in the Fall or in the Spring, covering the seed lightly with a mulch of sand and finely pulverized fertilizer. Pkt., 10c.

**AGERATUM** **BLUE PERFECTION** Fine for borders. Pkt., 10c.

**AMARANTHUS CAUDATUS** (Love Lies Bleeding)

Splendid plants for a tropical effect in mixed borders and shrubbery. Flowers in long drooping panicles, bright crimson. Height, two feet. Pkt., 10c.



Snapdragon

Prices Listed are Postpaid.



**SWEET ALYSSUM** Without a doubt the best border plant we have. Very hardy and blooms throughout the Fall, Winter and Spring months.

**LITTLE GEM**—Very dwarf and a profuse bloomer, making a solid mass of white all winter. Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 50c.

**SAXATILE (Basket of Gold)**—A hardy dwarf variety bearing a profusion of golden yellow flowers. Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 75c.

**LILAC QUEEN**—Good compact habit and a very pretty deep lavender lilac in color. Pkt., 10c; oz., 75c.

**AUSTRALIAN PEA VINE** (*Dolichos Lignosis*) Climber. Rose and purple color. One of the best climbers for a hot, dry climate. Pkt. 10c.

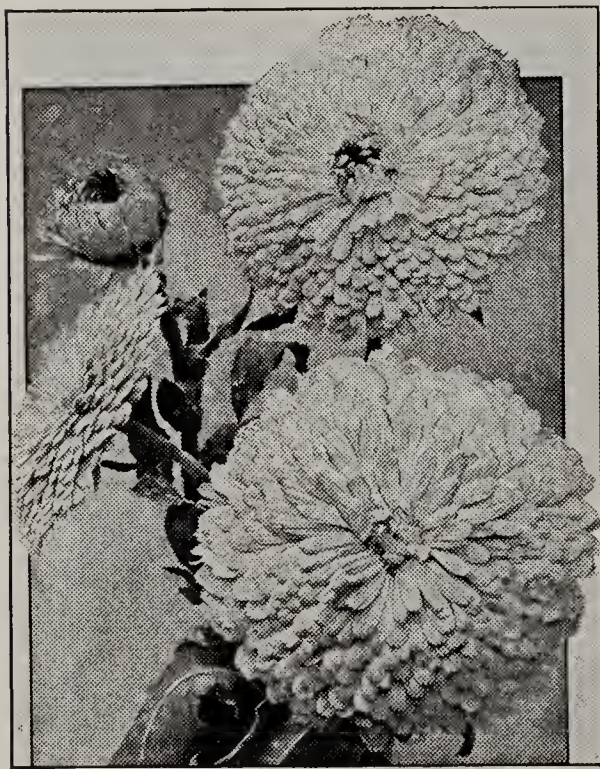
**ACROCLINIUM** (Everlasting Flower) Hardy annual everlasting flowers, white and self pink with golden centers. Should be cut the first day they open. Double mixed pink and white. Pkt., 10c.

**BALLOON VINE** A climbing annual. Bears a pretty inflated capsule resembling a balloon. White and green. Pkt., 10c.

**BALSAM APPLE** (*Momordica*) A climbing annual with graceful and ornamental foliage; yellow flowers and warted yellow fruits. Thrives in hot weather. Pkt., 10c.

**BEAN** Scarlet Runner A popular climber with scarlet flowers. Pkt. 10c.

**BALSAM** (Lady Slipper) A tender annual used for beds and borders. The foliage is brittle and the wax-like single and double flowers are very attractive. Height two feet. Plant in March, April and May. Mixed colors. Pkt., 10c;  $\frac{1}{4}$  oz., 25c.



**CALENDULA—Campfire**

**CALENDULA** (Pot Mari-gold) One of our most popular Winter flowers and very easily grown. Valuable as a cut flower. Plant from September throughout the Winter months. Space plants about 12 inches apart.

**LIEFGREEN'S ORANGE KING**—A splendid Calendula. Bright orange red with dark center. Flowers fully three inches in diameter when properly grown. We can recommend this variety as the best Calendula grown. Insist on our improved types. Pkt., 10c; oz., 50c.

**LEMON QUEEN**—Like Orange King, excepting the color is Pure Lemon. Pkt., 10c; oz., 40c.

**RADIO**—A novel and attractive addition to Calendula group. Deep orange in color with petals evenly and prettily frilled. Pkt., 10c; oz., \$1.00.

**CAMPFIRE**—A superb variety, color deep fiery orange. Pkt., 10c; oz., \$1.00.

**DOUBLE MIXED CALENDULA**—A splendid mixture of the various shades of lemon and orange. Pkt., 10c; oz., 30.

**CARDINAL CLIMBER** One of the best climbing plants for hot, dry weather. Grows to a height of 30 feet, with attractive green foliage covered with bright Cardinal Red flowers. Soak seed in hot water over night. Pkt., 15c.

Prices Listed are Postpaid



**CANNA** Grows three to six feet tall. Bright colored flowers and ornamental leaves suitable for beds and backgrounds. Soak seed in water several hours if planted during the Spring and Summer months. If planted in the Fall months, plant without soaking.

**CROZY'S BEST MIXED.** Pkt., 10c.

**CASTOR BEAN** (*Ricinus*) Very ornamental large-leaved variety. Excellent for shade and for grouping. Plant in the Spring after all danger from frost. Pkt., 10c; oz., 15c.

**CHRYSANTHEMUM** Annual. A very showy mixture, containing the most popular shades.

Double Mixed—Pkt., 10c.

**CALLIOPSIS** Showy and beautiful free flowering annual of easy culture, thriving in most any location, and blooms all Summer. Excellent for cutting and massing. Plant from September to May. Bi-Color—Dwarf mixed—Pkt., 10c; oz., 40c.

**CANDYTUFT** One of our best plants for edging, bordering and for cutting. A hardy annual, bearing large flower clusters during the Spring season. Plant from September throughout the Winter and early Spring months. Height about 12 to 18 inches.

**UMBELLATA** — White, Pink, Crimson and Mixed. Pkt., 10c; oz., 40c.

**CANTERBURY BELLS** A hardy perennial. Will bloom the first Spring if planted early in the Fall. Mixed colors. Pkt., 10c.

**CARNATION** Plant from September until April. Cover the seed lightly and protect until established. Transplant to about 12 inches apart in permanent location. Light shade is best suited to Carnations.



**CANDYTUFT**



**CENTAURIA**

**MARGUERITE MIXED**—Mostly double flowers. Pkt., 10c.

**CENTAUREAS** Commonly called Bachelor Button or Corn Flower. Plant during Fall and Winter months. Very easily grown and a great favorite as a cut flower. Height from 12 to 24 inches. Mixed Colors—Pkt., 10c; oz., 40c; Florists' Blue—Pkt., 10c; oz., 60c.

**CELOSIA CRISTATA** (Cockscomb) Annual. Plants are very ornamental and strong growers, producing magnificent combs of velvety flowers. Of easy garden culture and very attractive. Plant in early Spring

**DWARF MIXED**—A mixture of rich velvety colors. Pkt., 10c.

**CELOSIA PLUMOSA** (Feathered Cockscomb) A very fine selection of the Feathered Celosia containing many pleasing shades of color ranging from pale yellow to the deepest crimson.

**PLUMOSA MIXED**—Pkt., 10c.

Prices Listed are Postpaid



**CELOSIA MIXED**

A mixture of the Feathered and the Cristata Celosia. Many pleasing colors. Pkt., 10c.



Double Crested Cosmos

**COSMOS** Early Mammoth Flowering. Sow seed early in the Spring. When the plants are about 12 inches high pinch the tops back to make them branch.

**EARLY MAMMOTH PINK**—Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 60c.

**EARLY MAMMOTH CRIMSON**—Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 60c.

**EARLY MAMMOTH WHITE**—Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 60c.

**EARLY MAMMOTH MIXED**—Pkt., 10c;  $\frac{1}{4}$  oz., 20c; oz., 60c.

**EARLY DOUBLE CRESTED COSMOS**—A beautiful double or crested center Cosmos. Flowers are very large and make a striking appearance. About 75 per cent of the plants will produce crested flowers. Mixed colors—Pkt., 15c;  $\frac{1}{4}$  oz., 60c.

**KLONDIKE COSMOS**—Bloom in the Fall of the year. A handsome flower of brilliant orange yellow, very large. Thrives well in Arizona, but requires a long growing season. Plant early in the Spring. Pkt., 15c;  $\frac{1}{4}$  oz., 50c.

**CHINESE WOOLFLOWER**

As the name suggests, the flower resembles huge balls of wool. When cut, if hung head down until dry, it makes a beautiful everlasting flower. Easily grown. Plant in early Spring. Mixed colors—Pkt., 15c.

**CORIOPSIS**

*Lanceolata*  
*Grandiflora*

Very hardy, growing in most any location. The golden yellow flowers continue to bloom throughout the entire season. Excellent for cutting. Sow seed in the Fall and throughout the Winter months. Pkt. 10c; oz., 50c.

**NEW COREOPSIS DOUBLE**

What an improvement this variety is over the semi-double of a few years ago. A double that has not lost a bit of the grace and beauty this flower has always possessed, producing almost a continual supply of worthwhile yellow flowers that are readily adaptable to most any type of floral arrangement. Pkt., 20c;  $\frac{1}{2}$  oz., 75c.

**CLARKIA**

An annual of easy culture and very hardy. Thrives in sun or shade. Plant in Fall or Spring. Height, 18 inches. Double and Single Mixed. Pkt., 10c.

**DAHLIA**

Double Mixed—Sow seeds in beds and transplant to permanent location. Pkt., 25c.

**DIGITALIS**

(Fox Glove) Particularly adapted to the higher altitudes of Arizona. Will do well in warmer sections when planted in partial shade. Pkt., 10c.



Double Coreopsis

Prices Listed are Postpaid



**SHASTA DAISY** Alaska—This is the finest variety grown. The flowers are very large and splendid for cutting. Plant in early Fall or Spring. Soak seeds overnight in warm water before planting. When plants attain the proper size transplant in permanent bed, allowing about 12 inches between plants. Pkt., 15c.

**DOUBLE DAISY** *Bellis Perennis*—A hardy perennial which blooms freely in cool weather. Excellent for border, as it grows about four inches high. Plant early in the Fall. Mixed colors—Pkt., 10c.

**DELPHINIUM** (*Perennial Larkspur*) Beautiful hardy border perennials with noble spikes of handsome flowers; very useful for cut flowers, etc. Sow in the Spring or early Fall in the open ground.

**GOLD MEDAL HYBRIDS**—The finest hybrids to be found in Delphinium and all the lovely blues, lavenders and mauves in this mixture. The plants are vigorous growers, producing full, handsome spikes. Pkt., 15c.

**DIANTHUS** *Chinese Pinks*—Hardy annuals, bearing beautifully colored single and double blossoms. Grows about 12 inches high. Plant early in the Fall in rows where plants are to remain, and thin. **DOUBLE HEDDEWIGI MIXED**—Pkt., 10c;  $\frac{1}{2}$  oz., 50c.

**SINGLE HEDDEWIGI**—Mixed—Pkt., 10c;  $\frac{1}{2}$  oz., 40c.

**DIDISCUS COERULEUS** (*Blue Lace Flower*) Attractive annual plants with beautiful long-stemmed, pale lavender flowers that resemble lace. Grows about 18 inches high. As the seed germinates slowly, a light mulch over the surface would be beneficial. Pkt., 15c;  $\frac{1}{4}$  oz., 60c.

**DOLICHOS** (*Hyacinth Bean*) Climber. Splendid annual climber; clusters of purple and white flowers, followed by ornamental seed pods; 10 feet high. Plant in the Spring. All Colors, Mixed. Pkt., 10c; oz., 30c.

**EVENING PRIMROSE** A tall growing plant bearing an abundance of large yellow flowers which expand in the evening. May be planted in partial shade. Sweet scented. Pkt., 10c; oz., 25c.

**FOR-GET-ME-NOT** (*Myosotis*) A perennial with small blue star-like flowers in clusters. Plant in the early Spring months and transplant to a cool, moist location. Pkt., 10c.

**FOUR O'CLOCK** A hardy annual of easy culture growing about two feet tall. Very free flowering, bearing blooms of a great variety. Plant during the early Spring months. Pkt., 10c; oz., 30c.

**GAILLARDIA** There is nothing more admired for their rich blending of colors than the Gaillardia. They thrive everywhere and their colors are very gorgeous. The plants grow from one to two feet high and the double daisy-like flowers are very fine for cutting. Will bloom all Summer. Single and Double Mixed Pkt., 10c; oz., 75c.

**THE DAZZLER**—A charming new Single Gaillardia of immense size. Pkt., 25c;  $\frac{1}{8}$  oz., 50c.

**GERBERA** (*Jamesonii* Hybrids) Large daisy-like blossoms with flower stems rising to a height of about two feet. Is also called Transvaal Daisy. Colors range from white to crimson, pink, rose, yellow and lilac shades. Flowers both Summer and Winter. Start carefully under a light mulch in a sandy, well-drained soil if possible. Pkt., 25c.



Dazzler Gaillardia

Prices Listed are Postpaid



**GERANIUM** Geraniums will bloom the first year from seed if planted early in the Fall. Our mixture contains numerous shades of color, including many of the newest sorts. **Pkt., 15c.**

**GEUM** **MRS. BRADSHAW—Double Red—**A beautiful hardy perennial producing flowers in profusion all Summer. An excellent keeping cut flower, having long stems. Large bright orange scarlet double flowers. **Pkt., 15c.**

**GODETIA** **Tall Double Mixed—**Quick growing and profuse flowering hardy annual of showy colors. Easily grown by anyone. Sow seed early in open ground in the Fall months. **Pkt., 10c; oz., 50c.**

**GYPSOPHILA** **(Baby Breath)** Pretty free flowering elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. Sow during the Fall and Winter months.

**ELEGANS GRANDIFLORA—Pure White—Pkt., 10c; oz., 25c.**

**GYPSOPHILA—Elegans Carmine—**A beautiful deep carmine color. Fine for cutting and bouquets and very lasting. Plant same as the white. **Pkt., 10c; oz., 35c.**

**GOURDS** **MIXED VARIETIES—**Strong climbing plants producing many odd shapes and ornamental gourds. **Pkt., 10c; oz., 45c.**

**GOMPHRENA** **(Globe Amaranth) EVERLASTING FLOWER** A very attractive globe-shaped flower resembling a clover blossom which, when cut and dried, holds its shape and color. Grows about two feet tall and thrives and blooms throughout the hot Summer months. **Mixed Colors—Pkt., 10c; oz., 50c.**

**HELICHRYSUM** **(Straw Flower)** A free flowering hardy annual, bearing beautiful straw-like flowers in a great variety of shades and colors. To preserve, cut when partly open and hang with heads down until dry. **Pkt., 10c; oz., 60c.**



Double Hollyhock

**HUMULUS** **(Japanese Hop)**

A rapid growing ornamental climber covering arbors, trellises, etc., in one season. The foliage resembles the common Hop and is very luxuriant, making a dense vine. Will stand extreme heat and remains green until frost. An annual.

**JAPONICUS —** Green foliage. **Pkt., 10c; oz., 25c.**

**HOLLYHOCKS** One of the most majestic and desirable of hardy perennial plants, and a clump or line in any garden gives an effect not attainable with any other plant.

**EXTRA DOUBLE FLOWER-MIXED—**Seed for this mixture is saved from the very finest extra double flowers only. The best and most gorgeous colored. **Pkt., 10c; ¼ oz., 25c.**

**HOLLYHOCK CHATERS—**Superb double. Separate colors in Newport pink, white, yellow and crimson. **Pkt., 10c; ¼ oz., 40c.**

**KOCHIA** or Summer Cypress **Kochia Childsi—**A highly ornamental annual, having a cypress-like appearance. Its bright autumn coloring has given it two other names. "Mexican Fire Plant" and "Burning Bush." Plant during the Spring months. **Pkt., 10c; oz., 30c.**

Prices Listed are Postpaid



**KUDZU VINE** *PUERARIA THUNBERGIANA*—One of the most rapid-growing vines known. Will grow 50 feet in one season. Slow in germinating; soak seed in hot water over night. Flowers are pea-shaped and rosy purple in color. Pkt., 10c; oz., 60c.

**LARKSPUR** *Liefgreen's Giant Double Stock Flowered*. This is the finest strain of Larkspur in existence. The flowers are very double and are produced on long stems which makes them excellent cut flowers. They are very easily grown and no other flower will produce a greater show of blooms. At their best when planted in October and November, but can be planted all Winter. Remember to keep the seed beds moist, as it takes several weeks for the seed to germinate.

**LUSTROUS CARMINE**—A beautiful glowing Carmine. Produces large flowers on long graceful stems, making very attractive bouquets. Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 75c.

**LIGHT BLUE, DARK BLUE, ROSE PINK, LILAC, WHITE and MIXED COLORS**. Pkt., 10c;  $\frac{1}{4}$  oz., 25c; oz., 75c.

**LINUM** (*Scarlet Flax*) *Grandiflorum Rubrum* — A hardy annual of slender and graceful appearance with fine foliage and bright red flowers. It makes beautiful beds or borders and is largely used for cut flowers. Scarlet Flax makes a fine Fall and Winter flower, blooming profusely for several months. May also be sown in the Spring. Height  $1\frac{1}{2}$  to 3 feet. Pkt., 10c; oz., 40c;  $\frac{1}{4}$  lb., \$1.00.

**PERENNE** (*Blue Flax*)—Slender growing hardy perennial producing a profusion of light blue flowers. Height  $2\frac{1}{2}$  feet. Pkt., 10c.

**LINARIA** (*Baby Snapdragon*) A pretty garden annual deriving its name from its resemblance to the Snapdragon. Easily grown and are attractive as cut flowers. Plant during the Fall, Winter and Spring months. Height two feet. Our mixture is made up of blue, rose, lavender, yellow, etc. Pkt., 10c; oz., 50c.

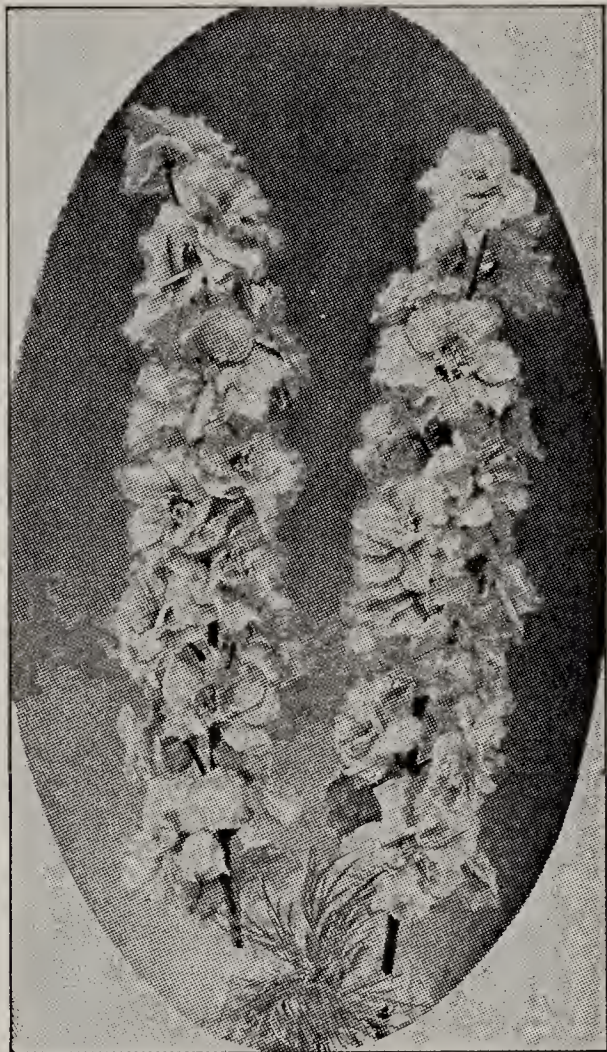
**LUPIN** One of the most attractive and easiest grown flowers. The plants grow two to three feet high and have handsome spikes of flowers which are fine for cutting. If the plants are not allowed to go to seed they flower for several months in the Spring. Plant during the Fall, Winter and Spring months. Plants should be thinned out to about 12 inches apart, as they grow quite large.

**HARTWEGI**—Dark Blue, Sky Blue, Roseus Pink and Mixed Colors. Pkt., 10c; oz., 30c.

**LANTANA** A perennial growing from two to three feet high. Grows to a hedge-like plant bearing clusters of verbenalike flowers. Very attractive. Plant seed in February, March and April. The seed will lay in the ground a long time before germinating. When large enough, transplant to permanent beds. Mixed colors, containing Scarlet, Orange, White, Yellow, Rose, etc., Pkt., 10c; oz., 75c.

**MIGNONETTE** A hardy annual growing from 6 to 12 inches high. Can be grown in shady places. Plant during the Fall, Winter and Spring months. Easily grown.

**GIANT MACHET, Mixed**—Pkt., 10c; oz., 30c.



Double Larkspur

Prices Listed are Postpaid



**MORNING GLORY** Free flowering beautiful climbers with rich and varied colored flowers, very useful for covering lattice work, verandas, etc., where they are exceedingly effective. Soak the seed for several hours in warm water before planting. Plant after all danger of frost.

**MAJOR TALL MIXED**—Attains a height of 15 feet or more, and comes in shades of Rose, Crimson, Blue and White. Pkt., 10c; oz., 25c.

**IMPERIAL JAPANESE MORNING GLORY**—The best Morning Glory for strong growth and varying colors. Height, 15 to 20 feet. Pkt., 10c; oz., 35c.

**MORNING GLORY, HEAVENLY BLUE**—Deep pure sky blue flowers. Makes an unusually attractive vine. Pkt., 15c;  $\frac{1}{4}$  oz., 40c.

**MOON FLOWER** (*Ipomoea*) Splendid rapid growing climbers. The flowers are beautiful and varied and resemble giant Morning Glories. The foliage is luxuriant and makes a growth of 10 to 30 feet a season. The seed of the Moon Flower should have the outer shell punctured and then soaked in water for twelve hours or more to germinate it. Plant during Winter and Spring months. Large Blue—Pkt., 10c; oz., 60c. Large White—Pkt., 10c; oz., 60c.

**MARIGOLD—For Summer Blooms** The Marigold is a hardy annual growing from six inches to 2½ feet tall. Flowers in various shades of yellow and orange. Very useful for bedding and for borders. Plant after all danger of frost is over. Cover the seed about one-eighth inch deep and when up thin out to ten or twelve inches apart.

**TALL AFRICAN DOUBLE ORANGE**—Beautifully formed flowers of gigantic size and bright color. Pkt., 10c;  $\frac{1}{4}$  oz., 40c; oz., \$1.25.

**TALL AFRICAN DOUBLE LEMON**—A pure citrus yellow. Large flower. Pkt., 10c;  $\frac{1}{4}$  oz., 40c; oz., \$1.25.

**TALL AFRICAN DOUBLE MIXED**—The above colors mixed. Pkt., 10c;  $\frac{1}{4}$  oz., 30c; oz., \$1.00.

**DWARF DOUBLE FRENCH MIXED**—Flowers much smaller than the African. Grows about ten inches high and greatly prized for bedding. Pkt., 10c;  $\frac{1}{4}$  oz., 20c; oz., 50c.

**GUINEA GOLD**—The flowers of this exquisite Marigold are loosely ruffled, semi-double and of medium size. The color, a brilliant golden

orange, is not found in any other Marigold. As a cut flower it is ideal, especially for bowl arrangement if grown without disbranching. Pkt., 20c.

## NASTURTIUMS

A favorite flower and very popular because of the great variety of colors and easy culture.

Plant in February and March for Spring flowers and early in the Fall in protected places.

**LIEFGREEN'S SPECIAL TALL MIXTURE**—This mixture contains the choicest colors of the Tall Nasturtiums, the rich, velvety varieties, and the new hybrids. The flowers are much larger than the old-fashioned kind. Pkt., 10c; oz., 20c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.45.

**LIEFGREEN'S SPECIAL DWARF MIXTURE**—This superb mixture will give a larger variety of colors in even proportions than any other Nasturtium mixture. Put up by ourselves from named sorts, and contains many of the new varieties. Pkt. 10c; oz., 20c;  $\frac{1}{4}$  lb., 50c; 1 lb., \$1.45.



Nasturtium

Prices Listed are Postpaid.



## NEW DOUBLE SWEET-SCENTED NASTURTIUM

**Golden Gleam**—A unique novelty in Nasturtiums. The plant forms a vigorous, large bush which throws out runners averaging 18 inches. The flowers are double, delightfully fragrant and of an attractive golden yellow color. When at full bloom the entire plant is a blaze of color. Pkt., 10c; oz., 75c.

## NICOTIANA or FLOWERING TOBACCO

A hardy annual growing three or four feet high and of branching habit. The plants are covered with the slender tubular flowers all Summer. They may be used as a background or as single specimens. Popular for its evening fragrance.

**SANDERAE MIXED**—A new, large, flowering type, with various bright-colored blossoms. Pkt., 10c.

**NEMOPHILA** A hardy California annual growing about six inches high. The blossoms are cup-shaped and the colors are blue, white, lavender and spotted. The seed may be sown from October to March and is very valuable for carpet bedding.

**INSIGNIA**—(Baby Blue Eyes)—Sky blue, with white eyes. Pkt., 10c; oz., 25c.

**PASSION FLOWER** A hardy perennial climber, very satisfactory for immense growth, as it will cover a porch or small cottage in one season. Pkt., 10c.

**PETUNIAS** For garden culture few flowers equal the Petunia in effectiveness. They are especially beautiful for borders and solid beds. They commence blooming early and will bloom throughout the Spring and Fall months. Start planting in September and throughout the Winter and Spring months. Scatter the seed thinly on an even surface and cover with a light layer of sand or manure mulch. Thin out plants to allow sufficient room for growth.

We recommend the following varieties:

**PETUNIA—Striped and Blotched**—A good Petunia for massing in beds and borders, yielding a profusion of brilliantly marked flowers. Pkt., 10c;  $\frac{1}{4}$  oz., 45c.

**PETUNIA—Improved "Rosy Morn"**

The flowers are produced in greatest abundance throughout the Summer and Fall; they are of a lovely clear pink color, contrasted by a broad white throat. Plants form neat compact bushes. Splendid for beds and porch boxes. Pkt., 15c;  $\frac{1}{8}$  oz., 60c.

**PETUNIA—Giants of California**—The finest large flowering strain of single Petunias. Magnificent flowers of extra large size, often measuring five inches in diameter, with very deep throat beautifully veined to the base. Pkt., 25c.

**PETUNIA—General Dodds**—A rich, blood-red; this is a fine color. The flowers are large and erect and the plants large and free blooming. Pkt., 15c;  $\frac{1}{8}$  oz., 50c.

**PETUNIA—Nana Erecta Violacea**—A new strain. This is a fine deep violet; the texture of the flower is like velvet and the plant growth erect and compact, like all of this class. Pkt., 15c;  $\frac{1}{8}$  oz., 50c.

**POPPIES** Probably no class of plants enjoys greater popularity and is more widely grown than the Poppies. The wonderful range of brilliant colors of their delicate, gracefully borne flowers is well known. The Poppies are quite hardy and the seed should be sown during



**PETUNIA—Giants of California Fringed**



the Fall months in a location where the plants are to flower as they do not transplant easily.

**CALIFORNIA POPPY**—Golden West—Yellow, with orange center. Large flower. Pkt., 10c; oz., 35c.

**CALIFORNIA POPPY**—Brilliant Mixed—A mixture of all the various shades. This mixture makes a very beautiful display of color. Pkt., 10c; oz., 40c.

**GIANT SHIRLEY POPPY**—No flower is so exceedingly graceful and decorates our gardens with such brilliancy of color as this Poppy. Plants about 18 inches tall. Pkt., 10c;  $\frac{1}{2}$  oz., 25c; oz., 40c.

**PEONY-FLOWERED**—Imposing double globular flowers resembling double Peonies. Splendid range of colors. **Mixed**—Pkt., 10c;  $\frac{1}{2}$  oz., 25c; oz., 40c.

**PEONY-FLOWERED DOUBLE**—Shrimp Pink. Pkt., 10c; oz., 50c.

" " " Cardinal Red. Pkt., 10c; oz., 50c.

" " " Pansy Violet. Pkt., 10c; oz., 50c.

**GLAUCUM (Tulip-Flowered)**—Beautiful variety, producing flowers of the most vivid scarlet, effective for beds or masses. Annual. Pkt., 10c; oz., \$1.00.

**ICELAND POPPY** Graceful hardy perennials with bright green-like foliage, formed in tufts, from which issue slender stalks about 15 inches high bearing brilliant flowers in endless profusion. If sown early in spring they will bloom the first summer. Mixed colors. Pkt., 10c;  $\frac{1}{2}$  oz., 60c.

**PYRETHRUM (Fever Few)** Hardy perennials which are easily grown and make handsome plants.

**GOLDEN FEATHER**—Fine compact habit of growth, with bright yellow foliage, largely used for edgings and ribbon borders. Height 9 inches. Pkt., 10c;  $\frac{1}{2}$  oz., 45c.

**PORTULACA** For exhibiting a display of dazzling brilliancy the Portulaca is unrivaled. This little plant delights in the sunshine and will stand considerable drought. Has glossy foliage, bearing cup-shaped flowers in brilliant colors. They are best sown in the Spring months as it is strictly a Summer plant. Sow the seed shallow in sunny place and sprinkle lightly.

**DOUBLE FINEST MIXED**—Flowers, perfectly double, of most brilliant colors. Pkt., 5c;  $\frac{1}{8}$  oz., 75c.

**SINGLE MIXED**—All colors. Pkt., 10c;  $\frac{1}{4}$  oz., 45c.

**PANSIES** To have Pansies at their best the seed should be planted during the Fall months in a semi-shaded location or in flats and when large enough transplanted where they are wanted to bloom.

Plant in rich soil and water liberally. The flowers should be kept picked to prolong the blooming period.

**PANSY, Good Mixed**—Flowers of medium size and beautiful in color. Pkt., 15c.

**PANSY, LIEFGREEN'S GIANT MIXED**—A mixture consisting of a selection of giant flowering varieties. The flowers are very showy and the plants of vigorous, compact growth. A very fine strain. Pkt., 25c.

**PHLOX DRUMMON-**

**DI** The Phloxes are the showiest and most easily raised of all annuals. We know of nothing which produces such a continuous supply of the most attractive flowers in a most wonderful range of colors. All the tints of the rainbow are represented with all possible variations of colors,



PANSIES

Prices Listed are Postpaid



veins and eyes of contrasting shades. For the best results sow seed in the Fall months.

**LIEFGREEN'S SPECIAL MIXTURE**—Contains a mixture of varieties that will delight and astonish you with its extensive variety of colors. Pkt., 10c;  $\frac{1}{4}$  oz., 60c.

We also have Phlox Drummondii in the following separate colors: Crimson, Violet, White, and Flesh Pink. Pkt., 10c;  $\frac{1}{4}$  oz., 60c.

**RANUNCULUS** Valuable cut flowers, double and semi-double of the most varied and brilliant colors. If sown early they bloom the first year. Height, one foot. Pkt., 25c.

**RHODANTHE—Everlasting Flower** One of the most attractive everlasting flowers. The flowers hang like little bells on the stems and make a pleasing and dainty cut flower either fresh or dried. **Mixed Colors**—Pkt., 10c.

**SALVIA (Scarlet Sage)** The most brilliant colored flowers and extremely useful for bedding. Blooms are of fiery red crimson color, continuing to flower for a long time. Tender perennials. Plant in early Spring. Pkt., 10c;  $\frac{1}{8}$  oz., 50c.

**SALPIGLOSSIS** Very showy bedding or border plants, with richly colored, funnel-shaped flowers, which are purple, scarlet, crimson, yellow, buff, blue and almost black. Height, one foot. Fine mixed sorts. Pkt., 10c.

**SCHIZANTHUS** Very beautiful and interesting annuals. This is one of the easiest annuals to raise from seed. Sow in open where plants are to flower. Exceptionally beautiful when in full bloom and literally covered with small orchid-like flowers.

**GRANDIFLORA MIXED**—Pkt., 10c;  $\frac{1}{8}$  oz., 75c.

**SWEET WILLIAM** (*Dianthus Barbatus*) A well known, attractive, free-flowering hardy perennial, producing a splendid effect in beds and borders with their rich and varied flowers. Of easy culture. Best planted in the Fall months. Height, 1 to  $1\frac{1}{2}$  feet.

**DOUBLE MIXED**—All colors. Pkt. 10c;  $\frac{1}{4}$  oz., 35c.

**SINGLE MIXED**—All colors. Pkt., 10c;  $\frac{1}{2}$  oz., 25c.



**SCABIOSA**

**SCABIOSA** Mourning Bride or Pincushion Flower. Hardy annual of easiest culture. Profusion of flowers in exquisite shades on long, wiry stems; cut flowers keep in good condition for a long time;  $2\frac{1}{2}$  feet high. Deserving a place in every garden, blooms profusely. Plant in the Fall months. Thin or transplant to about 12 inches apart.

**AZURE FAIRY** — Blue. Pkt., 10c.

**GRANDIFLORA WHITE**—Pkt., 10c.

**GRANDIFLORA CRIMSON** — Pkt., 10c.

**GRANDIFLORA ROSE PINK** Pkt., 10c.

**MIXED COLORS**—10c.

**SUNFLOWER** (*Helianthus*) Stately, hardy annuals of easy culture. Useful for background or as a fence and often grown for the seed. Height, six to eight feet.

**NEW RED SUNFLOWER**—Is a very apt description of this new variety. The plant is of a freely-branch-



ing habit, with well-shaped dark centered flowers of bright chestnut red, merging to a yellow at the tips of the petals. Height six feet. Pkt., 10c; oz., 50c.

**MAMMOTH RUSSIAN**—Is planted largely for seed. It also makes a good windbreak and a very ornamental background. Requires little attention. Pkt., 10c; 1 lb., 25c.

**SMILAX** A perennial vine which thrives best in a shady location. Very useful for decorative purposes. Pkt., 10c.

**STATICE Sinuata**—An everlasting flower which is increasing in popularity. The plants throw large sprays of flowers which may be dried and make fine Winter bouquets. The seed should be kept quite moist until germinated. Plant in the Fall months. True Blue, Lavender, White and Mixed Colors—Pkt., 10c.



Giant Imperial Double  
Stocks

## DOUBLE STOCKS

**Giant Imperial, Improved**—The Stock is one of our most popular Winter flowers. The plants will go through the Winter uninjured by frost and will bloom from early Spring well on into the Summer months. The Giant Imperial is the very latest improvement in Stocks, throwing fully 85 per cent of double flowers. Sow the seed in the Fall in the open ground or in flats. In thinning out, remember that the weak and delicate plants are those which usually throw the best double flowers.

**GIANA DOUBLE IMPERIAL STOCKS**—This wonderful new strain of Stocks is of branching habit, making it possible to break long branches of flowers from the main stalk without injuring or destroying the beauty of the plant. The flowers are large and many of them on a stem. The sweet perfume of the Stocks make them most desirable for garden or for vases.

**IMPERIAL CHAMOIS**—Ivory, tinted Rose. Pkt., 15c.

**IMPERIAL DARK BLUE**—Near Purple. Pkt., 15c.

**IMPERIAL BLOOD RED**—Bright Red. Pkt., 15c.

**IMPERIAL LAVENDER** — Light Lavender. Pkt., 15c.

**IMPERIAL ROSE**—Deep Rose Pink. Pkt., 15c.

**IMPERIAL WHITE** — Pure White. Pkt., 15c.

**IMPERIAL YELLOW**—

**IMPERIAL MIXED**—All colors mixed. Pkt., 15c;  $\frac{1}{8}$  oz., 65c.

**COLLECTION** of the above, separate colors, 75c;  $\frac{1}{8}$  oz., 65c.

## STRAW FLOWERS

A mixture made up of the various varieties of everlasting flowers. Pkt., 10c.

Prices Listed are Postpaid.



## LIEFGREEN'S BEAUTIFUL VERBENAS

**VERBENA—(Hybrida Grandiflora) Giant Flowering.** This new strain of Verbena is without doubt the largest and the most beautiful Verbena grown. Each flowerlet is very large, which gives the plant a very brilliant effect. Plant during the Spring and Fall months. Plant shallow and cover the seed bed with a light silt or manure mulch. To aid germination keep the seed bed moist until the plants are well out of the ground. Thin out or transplant to allow plants plenty of space for expansion. Verbena will hold over the Summer nicely, but should be trimmed back in the Fall to induce new growth.



Hybrid Grandiflora Giant  
Verbena

**LUCIFER**—Solid Scarlet, no eye.  
 $\frac{1}{4}$  oz., 60c; 1 oz., \$2.00.

**LUMINOSA**—Beautiful Pink,  $\frac{1}{4}$  oz., 60c; 1 oz., \$2.00.

**DEEP PURPLE**— $\frac{1}{4}$  oz., 60; 1 oz., \$2.00.

**WHITE**— $\frac{1}{4}$  oz., 60c; 1 oz., \$2.00.

**VIOLA ODORATA—THE VIOLET SWEET VIOLET**—The true blue Sweet Violet. Favorite hardy plants, highly prized for their fragrant flowers; six inches high. Seed germinates slowly. Succeeds best in half shady situations. Pkt., 25c.



Venidium Fastuosum

**VENIDIUM Fastuosum**—This plant thrives in Arizona where the climate is similar to its natural habitat. Its growth averages 2 feet high, has grey silken foliage and deep orange composite flowers with a purple-black center zone inside the ray. Flowers grow to 4 or 5 inches in diameter. They stand well above the foliage and effect a colorful display. Sow seeds in the open ground where they will obtain full sun. Pkt., 25c.

**VINCA ROSEA** Periwinkle Ornamental free-blooming plants with dark foliage and handsome pink and white flowers. The seed germinates slowly. Sow in the Fall and Spring months.

**VINCA ROSEA**—Mixed Colors. Pkt., 10c.

**WALLFLOWER** Wallflowers should be better known. Their adaptability for out-door bedding and the peculiar sweet fragrance of their flowers should win favor. The oriental coloring of the flowers in their rich reds and yellows is very effective. They are easily grown and last long as cut flowers. Pkt., 10c.

**WILD CUCUMBER** This is a quick growing climber. It is thickly dotted over with pretty, white, fragrant flowers, followed by an abundance of ornamental and prickly seed pods. Plant in the Spring. Pkt., 10c.

**WILD GARDEN MIXTURE** This is not a mixture of wild flowers, but of garden annuals, with a few wild species added. It contains a large number of different kinds, all of them quite hardy and varieties that will grow with

Prices Listed are Postpaid



the least amount of care and produce quantities of flowers for a long period. Plant in the Spring and Fall. Pkt., 10c.

**XERANTHEMUM DOUBLE MIXED**—One of the most attractive and satisfactory everlasting flowers. The flowers are white, purple, yellow and rose and are pretty in the garden or dried. Plant in the open ground in a sunny situation. Pkt., 10c.

**WILD FLOWER MIXTURE** A splendid mixture of true annual wild flowers so blended as to give a succession of bloom from early spring to mid-summer. All colors may be found in this mixture. For best results seed should be sown in a prepared seed bed. They may be planted from fall to early spring—a longer bloom resulting from the fall planting. If you have a piece of ground you cannot irrigate, or have not time to give particular attention, yet you want to have something beautiful instead of unsightly weeds, we advise you to plant our Wild Flower Mixture. Five pounds of seed is sufficient to plant an acre.

**WILDFLOWER MIXTURE**—A fine mixture of many species. Pkt., 10c; oz., 45c;  $\frac{1}{4}$  lb., \$1.65; lb., \$5.00.

## **SWEET PEAS—Liefgreen's Giant Spencer Sweet Peas**

VARIETIES TRIED AND PROVEN IN THE SALT RIVER VALLEY AND ADAPTED TO ARIZONA CLIMATIC CONDITIONS—Sweet Peas are probably the most popular flower in America. They are loved by everyone, both for their beautiful coloring and their delightful fragrance. For the best results we

advise you to follow our instructions for planting. We offer the following instructions according to our own method of planting.

**CULTURE**—Avoid dense shade. Select a place in the open where the sun shines at least three-fourths of the day and where the vines may be trained on a trellis. Dig a trench about a foot or 18 inches wide and 18 inches deep. Place about six or eight inches of well-rotted manure on the bottom of the trench. Mix a liberal amount of manure with the soil that has been removed and replace it. After the soil has settled sufficiently, open a trench in the bed about six inches deep and plant one ounce of seed to about 20 to 25 feet of row. During the warm weather cover the seed about two to three inches deep and in cooler weather about one inch is sufficient. Care must be taken during warm weather not to rot the seed with moisture. After planting seed soak the trench thoroughly and follow with a liberal sprinkling of manure or dried grass to prevent the surface soil from crusting. After the Peas have grown six or eight inches begin to draw the soil to them, gradually filling the trench. This will necessitate another trench on each side of the row, through which to water the vines during the rest of the



**SWEET PEAS—Liefgreen's Giant Spencer**

season. A manure mulch around the plants will keep them in good growing condition. Frequent cultivation is also necessary. Keep them well watered and at blooming time keep the blossoms picked to insure a long growing season. Ask about our special fertilizer for Sweet Peas.

**Prices Listed are Postpaid.**



# LIEFGREEN'S SELECTION OF GIANT SPENCER SWEET PEAS

The following varieties are the best in color, size, fragrance, abundance of bloom and adaptability to Arizona's climatic conditions. Call for these varieties and be assured that you are planting the best:

**ROYAL SOVEREIGN**—Glistening Orange Salmon—One of the most satisfactory in this color.

**BLANCH FERRY**—Bright Rose and White. Always a popular sort.

**COMMANDER GODSALL**—Blue. The nearest violet blue we know. A very fine one.

**CRIMSON KING**—Crimson. Deep rich color and very large.

**DAFFODIL**—A beautiful, clear, Primrose Yellow.

**PINKIE**—Mammoth Rose Pink—Long stems. Best introduced.

**HAWLMARK SCARLET**—A beautiful vivid Scarlet.

**KING WHITE**—Large Wavy White.

**JACK HOBBS**—Salmon pink. Pale pink flushed salmon. Good flower and stem.

**MRS. TOM JONES**—Light Blue. Good clear color and good flower.

**POWERSCOURT**—Lavender. One of the finest. Vigorous.

**ROYAL PURPLE**—Very deep color.

**WELCOME**—A dazzling scarlet. Strictly sunproof. Very robust grower. Bold flower on stout stems.

**TANGERINE**—Glowing Orange. Ours is a greatly improved strain.

**WARRIOR**—Maroon. Color is deep, flowers large and stem extra long.

The above varieties: Pkt., 10c; oz., 40c.

## Liefgreen's Giant Spencer Mixture

In preparing this mixture we are giving our customers all the best varieties in this class and all possible color variations, including many brand new kinds as well. A liberal planting of this mixture will give a most magnificent display of the Giant Spencer types. Pkt., 10c; oz., 30c; ¼ lb., 90c; 1 lb., \$3.00.

### SWEET PEAS — New Early Large Flowering Spencer

**FOR WINTER BLOOMING.** When you plant our Early Flowering Spencer Sweet Peas you are planting the earliest and the largest flowering Early Sweet Peas grown. **EARLY FLOWERING SPENCERS** are especially valuable for their early flowering qualities. Planted in September and October, they will bloom as early as January, although they may be planted any time during the Fall and Winter months and will bloom four to six weeks in advance of the regular Spencers.

**ALL WHITE**—Largest waved pure White.

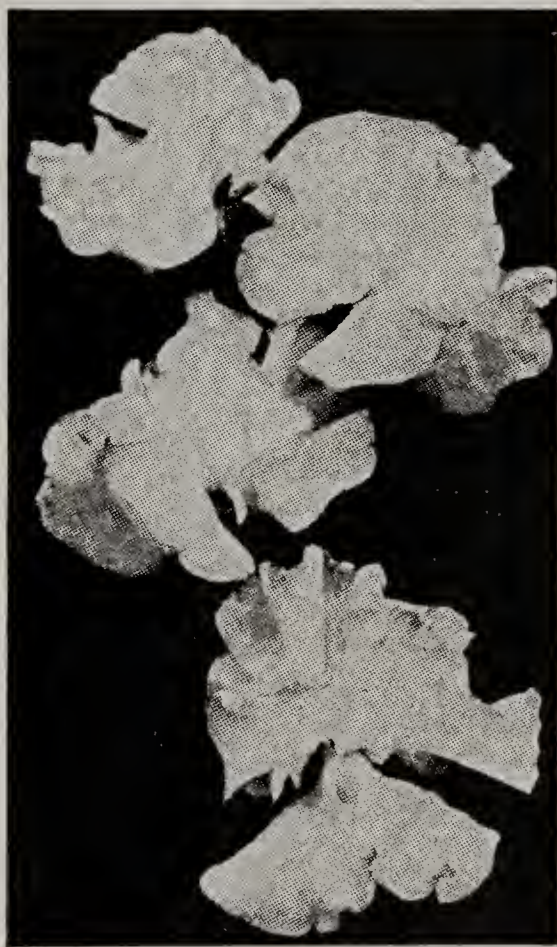
**AMETHYST** — Light Purple. Very fine.

**AVIATOR** — Dazzling Crimson Scarlet.

**BLUE BIRD**—Violet Blue. Extra large and one of the best.

**COLUMBIA**—Salmon Rose with White Wings.

**FAIR MAID**—Blush Pink suffused Salmon.



Liefgreen's Early Large Flowering Sweet Peas

Prices Listed are Postpaid



**GLITTERS**—Cerise. One of the most popular for all purposes.

**LAVENDER KING**—Clear Lavender of perfect form, large size.

**MEADOW LARK**—Large Early Cream color on long stems.

**OTHELLO**—Maroon. Strong grower, large flowers and good long stem.

**ROSE DORE**—Beautiful soft Rose Pink, delicately suffused with Salmon.

**ZVOLENSK'S ORANGE**—A very strong grower with extra long flowers and good stems.

**ZVOLENEK'S ROSE**—Giant Rose. Pink, vigorous, extra large flowers and exceedingly long stems. Fine exhibition.

The above Early Flowering Spencers: Pkt., 15c; ½ oz., 35c; oz., 60c.

## LIEFGREEN'S EARLY LARGE FLOWERING SPENCERS MIXED

This mixture is made up of the very cream of the Early Flowering Spencers. Varieties are selected for their bright colors and large flowering qualities as well as their adaptability to Arizona conditions. Plant this splendid mixture and you will be surprised with the gorgeous display of wonderful blossoms. Pkt., 10c; ¼ oz., 20c; ½ oz., 30c; 1 oz., 45c; ¼ lb., \$1.35; 1 lb., \$4.50.

### Giant Spencer Collection

ONE PACKAGE EACH (15 VARIETIES IN ALL)  
PREPAID FOR \$1.00

### Early Flowering Spencer Collection

13 REGULAR 15c PACKETS

THE ENTIRE COLLECTION OF THE  
VARIETIES FOR .....

**\$1.25**

Prices Listed are Prepaid



### New Home Beauty

You'll have finer success with all of your gardening activities if you feed everything you grow with Vigoro. It's the plant food that contains ALL of the necessary elements. It's balanced!

100 lbs. \$5.00 50 lbs. \$3.00

25 lbs. \$1.75 10 lbs. 85c

5 lbs. 50c 12 ozs. 10c

Prices f. o. b. Phoenix

**VIGORO**  
*Complete plant food*

### LIEFGREEN'S FERTILIZER MIXTURE

Use our complete fertilizer 8-9-6 mixture for vegetables and flowers, lawns, trees, shrubs, etc., consisting of 8% Nitrogen 9% phosphatic acid and 6% potash. The organic matter is made up of 30 lbs. of blood meal per 100 lb., bag. 5 lb.s., 40c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00,



## ZINNIAS Liefgreen's Giant Showy Zinnias

The Zinnia is possibly more at home in the warmer sections of Arizona than any other flower. It is sun-loving, very easy to grow and a favorite in thousands of Arizona gardens. We wish to stress the fact that our Zinnias, are absolutely the best strains in existence. The Zinnia is strictly a hot weather plant and should not be planted until March. Plants may be continued throughout the Summer.

**CULTURE**—Plant after all danger of frost is over. The seed should be planted about one-half inch deep and the seed bed covered with a mulch of light barnyard fertilizer or grass to conserve the top moisture. Plant in rich soil in rows at least three feet apart and thin out plants so they are about 12 inches apart. Never plant Zinnias in the shade, as they delight in the full sunshine. Keep the rows free and clean from Bermuda Grass and weeds and cultivate and irrigate often. To avoid mildew, dust the ground around the plants with ground sulphur as soon as the buds appear. If you follow these instructions we know your efforts will be rewarded.

## ZINNIA — Liefgreen's Giant Dahlia Flowered

The DAHLIA FLOWERED ZINNIA is the most popular of all the Zinnia types grown. The large size, beautiful petals, extra ordinary colors and good keeping qualities have made them popular with all who grow them. They resemble a Dahlia in appearance and when in full bloom often measure five and six inches in diameter. The variations in the colors are wonderful and we cannot recommend them too highly. We list them in the following colors.

**EXQUISITE**—One of the most pleasing shades. Color a light Rose, with deeper Rose center.

**ILLUMINATION**—A deep soft rose. Very beautiful.

**CRIMSON MONARCH**—By far the largest and best of the red shades. Flowers often eight inches in diameter. Plants very vigorous.

**ORIOLE**—We consider this the most beautiful of its class. It is an immense Orange and gold bicolor, changing slightly as it ages.

**CANARY BIRD**—Delicate primrose—very large and holds its color well.

**DREAM**—A fine, deep Lavender, turning to Purple (Mallow Purple), a new, desirable shade in Zinnias.

**POLAR BEAR**—Very large pure White, best White in Zinnias. True Dahlia form.

The above varieties—Pkt., 15c;  $\frac{1}{4}$  oz., 75c; oz., \$2.00.

One Each of the Above Varieties (Seven Packets) for 75c.

**DAHLIA FLOWERED ZINNIA MIXTURE**—A blend of the very best types of Dahlia Zinnia and sure to please the most critical. Makes an excellent garden show and fine flowers for cutting. Pkt., 15c;  $\frac{1}{4}$  oz., 50c; 1 oz., \$1.50.



ZINNIA—GIANT DAHLIA FLOWERED

## LIEFGREEN'S Giant Mammoth Zinnias

In presenting the above type we offer a rare collection of striking and desirable colors, enormous flowers. They have smaller flat centers than the Dahlia Flowered, with more loosely placed petals. The petals are decidedly imbricated and the flower from bud to full bloom presents a graceful appearance. Plant the full collection of the following colors: See next page.

Prices Listed are Postpaid



**GIANT LEMON QUEEN**—An immense flower and most pleasing in color. The Canary Yellow petals are tinged with Cerise on the lower side, the two shades blending into a variety of lemon tints as the flower develops. It is unique in having a pleasant odor.

**GIANT ORANGE QUEEN**—A new Orange shade, exceptionally bright in tone. Giant flowers of graceful appearance.

**GIANT (MISS WILMOT)**—A beautiful soft Pink. Without doubt the finest Zinnia of this color in existence.

**GIANT (SCARLET GEM)**—A large, beautiful, bright Scarlet with fine form and good depth of petals. Very large.

**GIANT—(PURITY)**—A very large pure white with delightful form.

**GIANT LAVENDER GEM**—Deep lavender purple.

All of the above varieties—Pkt., 10c;  $\frac{1}{4}$  oz., 50c; 1 oz., \$1.50.

### Giant Mammoth Zinnia Collection

ONE EACH OF THE ABOVE VARIETIES (SIX 10c PKTS.)  
FOR 50c

LIEFGREEN'S GIANT MAMMOTH—Mixed Colors. Pkt., 10c;  
 $\frac{1}{4}$  oz., 35c; oz., \$1.00.

### LIEFGREEN'S Lilliput Pompon or Baby Zinnia

If you have room for two rows of Zinnias, sow the seeds of the Dahlia-Flowered or California Mammoth in the back-ground, and Lilliput Pompon in the front row. This makes a charming combination and will give a greater variety of flowers for cutting purposes. Pompon Zinnias are easily grown and the flowers compare favorably with the Pompon dahlia. Grows 2 feet high.

**Canary Yellow**—Primrose yellow.

**Crimson Gem**—Dark crimson.

**Purple**—Deep purple.

**Salmon Rose**—Florists favorite.

**White Gem**—Pure white

Above varieties—Pkt., 10c;  $\frac{1}{4}$  oz., 45c; 1 oz., \$1.25.

**Lilliput Mixed**—Containing all the colors. Pkt., 10c;  $\frac{1}{4}$  oz., 30c; 1 oz., \$1.00.



LILLIPUT OR BABY ZINNIA

### ZINNIAS — Giant Victory Quilled Mixed

The flowers are very large, with velvety quilled petals. The plants are vigorous and well branched. Pkt., 15c.

**ZINNIAS—Giant Picotee Mixed** This Zinnia is in a class by itself. In addition to its being double and large flowered, each petal is distinctly tipped with a darker shade of the same color, making it novel and attractive. Pkt., 15c.

**ZINNIA Scabiosa Flowered**—A new Zinnia much resembling the Scabiosa. Flowers are 2 to 3 inches across, in many desirable colors and with stems suitable for bowl arrangements and small bouquets. A few off type may be expected. Mixed colors. Pkt., 25c.

Prices Listed are Postpaid



## FIELD SEEDS

**LIEFGREEN BRAND CHILIAN ALFALFA SEED**—Chilian Alfalfa seed is the type used very extensively in the Salt River Valley. Plant 20 pounds per acre. 1 lb., 25c; 10 lbs., \$2.00.

**CYCLONE SEEDER**—Thirty to forty acres of alfalfa, millet, etc., can be sown in a day with this little machine. It broadcasts evenly and can be used with perfect success. Each, \$2.60 postpaid.

**LIEFGREEN BRAND HAIRY PERUVIAN ALFALFA SEED**—Produces remarkable amount of tonnage. 1 lb., 25c; 10 lbs., \$2.00.

**SUDAN GRASS**—A drouth-resisting annual. Grows in a wide range of soils, from sand to the heaviest adobe. 1 lb., 20c; 10 lbs., \$1.75, postpaid. Write for quantity price.

**STANDARD MILO MAIZE**—A distinct strain of highly selected Maize, field rogued and carefully harvested. Plant three pounds to the acre in 3-foot rows. 5 lbs., 50c; 10 lbs., 85c.

**LIEFGREEN'S DWARF MILO MAIZE**—A very select strain of Dwarf Milo Maize growing to a height of 4½ to five feet. Makes a heavy stock and produces heavily. Plant three pounds to the acre. 5 lbs., 75c; 10 lbs., \$1.25.

**LIEFGREEN'S RE-SELECTED HEGARI**—Harvested from selected heads. Unlike most other sorghums, Hegari not only produces a heavy crop of grain, but because of the sweet, juicy stalk and foliage it has the added feature of making good pasture or roughage and excellent silage. 5 lbs., 50c; 10 lbs., 85c.

**STANDARD BARLEY**—The common or bearded variety of Barley is the staple feed grain of the Southwest and is unequalled as a Winter pasture for cattle and sheep.

**BEARDLESS BARLEY**—Best for hay and much in demand when a dependable strain can be had.

**TEXAS RED OATS**—For Fall and Spring sowing in Salt River valley.

**EARLY BAART WHEAT**—The best strain of milling wheat for central and southern Arizona and Mexico. Planted from October to March.

**CLUB WHEAT**—The most popular soft Spring Wheat.

**EARLY AMBER CANE**—One of the most widely and quickly grown forage crops both for cows and horse feed. For pasture we recommend sowing from 50 to 60 pounds per acre.

**RED TOP CANE**—This variety is more extensively grown for cattle and hog pasture, and will make an abundance of fodder either green or cured.

**TEXAS SEEDED RIBBON CANE and ORANGE CANE** are the two best varieties when grown for syrup purposes. Write for prices.

**DWARF ESSEX RAPE**—Recommended as a pasture for sheep and hogs, furnishing fine pasture in six to eight weeks after planting. Rape is best sown in drills at the rate of five pounds per acre. 1 lb., 25c; 10 lbs., \$1.75, postpaid.

**SUNFLOWER**—Single heads measure 15 to 20 inches in diameter, and contain an immense amount of seed, which is highly valued by poultry breeders as poultry feed. 1 lb., 25c; 10 lbs., \$2.00, postpaid.

**GOLDEN MILLET**—An excellent catch crop. May be planted as late as September 15 in the Salt River Valley and still produce a good crop of hay. Sow 30 pounds per acre. 1 lb., 20c; 10 lbs., \$1.50, postpaid.

**WINTER RYE**—Grown here only as a Winter pasture crop since it does not make grain profitably. Prices on application.

**VETCH**—Sow 40 pounds per acre with grain. Is hardy and makes a fine Winter growth. 1 lb., 20c; 10 lbs., \$1.50, postpaid. Write for quantity price.

All grain prices are subject to change without notice. We do not quote prices here. Please ask for samples and prices, stating quantity. Small quantities listed are postpaid.



## FIELD PEAS, BEANS AND MISC.

**SESBANIA—Wild Hemp**—Sesbania is a vigorous annual growing Legume. It thrives in warm weather and will grow on alkali and other poor soils. Sesbania is a very fast growing plant requiring only 8 to 10 weeks from time of germination to time of plowing under. Sow broadcast at the rate of 30 to 40 pounds per acre. We consider Sesbania the very best fertilizer crop for summer growth. 1 lb., 25c; 10 lbs., \$2.00, postpaid. Ask for quantity price.

**WHIP-POOR-WILL COW PEAS**—As a soil renovator and a fertilizer the Cow Pea is in a class by itself. The heavy cropping of our soil year after year necessitates careful crop rotation to keep the land fertile and in good producing condition, and the Whip-poor-will has proven one of the best varieties for this purpose in the Arid Southwest. They should be planted at the rate of 50 to 100 pounds to the acre. 1 lb., 25c; 10 lbs., \$1.75, postpaid. Ask for quantity prices.

**BLACK-EYED PEAS**—We have found that this variety does better in this section than in any other. It is easy to grow, does well, and produces more dry peas and more vine than any of the varieties we have yet tried. 1 lb., 25c; 10 lbs., \$1.75. Write for quantity prices.

**PINK BEANS**—These are planted extensively throughout various sections of the Southwest for dry beans. They require about 105 days to mature; therefore, should be planted in climates similar to the Salt River Valley, about the last week in July. Plant 40 pounds of seed to the acre, in rows about 30 to 36 inches apart. Price for hand-picked beans: 1 lb., 25c; 10 lbs., \$1.75. Write for quantity prices.

## CLOVERS AND GRASS SEEDS

**SWEET CLOVER (Melilotus Alba) or White Blossom Sweet Clover**—Sweet Clover is used for hay, pasture and green manure as well as fertilizing and renovating worn-out and alkaline soils. Sow in the Spring or Fall at the rate of 20 to 25 pounds to the acre. Scarified Seed, per pound, 30c; 10 lbs., \$2.50. Write for quantity price.

**MELILOTUS INDICA (Sour Clover)**—A Clover native to the Salt River Valley. Melilotus Indica is the best legume with which to build up your soil. It is easily plowed under and very rich as a fertilizer. As a cover crop in citrus groves it has no equal. We offer only the best quality, thoroughly re-cleaned and scarified seed. 1 lb., 15c; 10 lbs., \$1.25. Write for quantity price.

**BERMUDA GRASS**—May be used for pasture or for lawn in southern climates. It requires three weeks under favorable conditions to germinate Bermuda Grass and it should be kept thoroughly soaked during that time. 1 lb., 30c; 10 lbs., \$2.50. Write for quantity price.

**RED TOP PASTURE GRASS**—Another pasture grass for the higher altitudes. Succeeds on all soils from moist to swampy land, making a permanent pasture, and furnishing a highly nutritious feed. Hulled seed. Sow 15 pounds per acre. 1 lb., 30c; 10 lbs., \$2.50. Write for quantity price.

**TIMOTHY**—Much Timothy is sown in our higher altitudes throughout the Southwest, where it is quite successful. It requires 15 pounds per acre when sown alone. 1 lb., 25c; 10 lbs., \$2.00. Write for quantity price.

**ORCHARD GRASS**—A valuable pasture grass for the higher altitudes of Arizona; produces an immense quantity of forage and hay of the best quality. After being cut it comes up quickly and yields heavily. Sow 35 pounds per acre. 1 lb., 35c; 10 lbs., \$3.00. Write for quantity price.

**BROME GRASS (Bromis Inermis)**—This grass is most satisfactory in all localities where arid soils demand a plant that will stand the drouth. Its nature is to stool and it seldom produces seed the first year. We think it will prove an excellent pasture grass for general range purposes. 1 lb., 50c; 10 lbs., \$4.50, postpaid. Write for quantity price.

Prices Listed are Postpaid—Write for Quantity Prices.



## FERTILIZERS

**LIEFGREEN'S 8-9-6 COMMERCIAL FERTILIZER** for Vegetables Flowers, Lawn, Shrubs and Trees is a scientifically prepared chemical compound carrying the necessary elements for the promotion of plant growth.

It not only enhances the beauty of the blossom and the color of the lawn, but it is a wonderful stimulant to vegetable life and, in addition to its many uses in the garden, it can be applied with wonderful results in the field for vegetables and other crops.

This fertilizer is easy to apply and it is in powder form and quickly available. 5 lbs., 40c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.00.

Write for quantity prices

**FISH FERTILIZER** This fertilizer is composed of dried fish, finely ground, and is purely organic. An excellent fertilizer for all crops. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$3.00.

**DRIED BLOOD MEAL** is very rich in nitrogen and an excellent plant-food for increasing the yield of vegetables and fruit, and also for stimulating the growth of flowers. There is from 12 to 13% nitrogen 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.10; 50 lbs., \$2.00; 100 lbs., \$3.75.

**BONE MEAL** 3½% nitrogen and 16% phosphoric acid. Neither of these two elements are immediate in their action. If put in the soil in the Fall, some results will show the following Spring. Slow but sure 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$2.75.

**NITRATE OF SODA** Contains about 15% nitrogen. Is very quick in action and entirely soluble. Is best applied after the plants are growing. 5 lbs., 50c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.50.

**TREBLE SUPER-PHOSPHATE** about 45% phosphoric acid. 5 lbs., 50c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.10; 100 lbs., \$3.75.

**SULPHATE OF POTASH** 5 lbs., 50c; 10 lbs., 75c; 25 lbs., \$1.35; 50 lbs., \$2.50; 100 lbs., \$4.50.

**AMMONIUM SULPHATE** contains about 20% Nitrogen. For garden use rake the soil, one pound to every 150 square feet. One pound is sufficient for any 1-year-old tree or 1½ pounds for a 2-year-old tree. For field crops, apply 200 lbs. per acre. 5 lbs., 50c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.50.

**GYPSUM** Gypsum brings about a mechanical change in the soil by making it more pervious to water and air. Very heavy adobe soils are much improved with an application of Gypsum, which loosens it and this condition tends to prevent packing and baking. Gypsum is also used in the treatment of soil containing black alkali. 10 lbs., 25c; 25 lbs., 50c; 50 lbs., 75c; 100 lbs., \$1.25.

**HYDRATE OF LIME** for sour soil conditions. 10 lbs., 30c; 25 lbs., 50c; 50 lbs., 85c.

All Fertilizers and soil correctives are priced f. o. b. Phoenix. As prices fluctuate, they are subject to change without notice. Write for quantity prices.

**PEAT MOSS** Peat Moss is a valuable soil improver for all horticultural and agricultural purposes. It consists chiefly of decomposed vegetable or organic matter and increases the humus content of the soil. It absorbs ten times its weight in water, releasing it for the plants in periods of drought. Use Peat Moss liberally on flower and vegetable gardens and on lawns. Mulch roses, fruit trees, etc. to conserve moisture. A bale of Peat Moss when loosened will cover 700 sq. ft. Per bale (about 150 lbs.) \$4.00 f.o.b. Phoenix.



## INSECTICIDES AND SPRAY MATERIALS

**“BLACK LEAF 40”** Is guaranteed to contain 40% of nicotine by weight. It is a safe and effective spray for Aphids (Plant Lice; Thrips, Leaf Hoppers, Apple Red Bug, Pear Psylla and similar insect pests in the orchard, truck garden, vineyard, flower garden and park.

Full directions on the package. 1-oz. bottle, 5c; 5-oz., \$1.00; 1 lb. tin, \$2.25; 2-lb. tin, \$3.25; 5 lb. tin \$6.00; 10 lbs., \$9.85. Sent by express or freight only. Cannot be mailed. Prices change without notice.

**DRY LIME SULPHUR** For dormant spray use 12 to 15 lbs. to each 50 gallons of water. For Summer spray, 3 to 4 lbs. to each 50 gallons of water. Lb., 35c; 5 lbs., \$1.40.

**BORDEAUX MIXTURE** (Dry). The best fungicide for curing and preventing black rot, mildew, blight, leaf curl, scab or other fungoid diseases on fruits and plants. One pound will make 5 gallons liquid. Lb., 35c; 4 lbs., \$1.00.

**SODIUM FLUOCILICATE** Used very successfully in combating Mexican bean beetles, striped cucumber beetles, house ants, roaches and other insects. For information on insect pests, see guide.

**SODIUM FLUOCILICATE**—1 lb., 30c; 5 lbs., \$1.25; f. o. b. Phoenix. Cannot be mailed.

**WHITE ARSENIC** Used primarily for making poison mash bait for grasshopper infestations. Price: Lb., 15c; 5 lbs., 60c; f. o. b. Phoenix. Cannot be mailed.

**FISH OIL SOAP** An excellent and inexpensive means of killing plant lice and scale insects. Makes a good wash for trees and plants. Lb., 25c; 10 lbs., \$2.00. In large quantities we quote very low prices. Can be mailed. Postage extra.

**ARSENATE OF LEAD** We unhesitatingly recommend Arsenate of Lead as being the best means of ridding trees and plants of all leaf-eating insects, such as codling moth, potato beetle, cabbage worms, etc. Lb., 40c; 4-lb. pkg., \$1.00. Cannot be mailed.

**CALCIUM ARSENATE** Use at the rate of 10 to 15 pounds to the acre on lettuce before heading for green worms. We also recommend it for peas and any other vegetables for eating insects. Price: 4 lbs., \$1.00. Cannot be mailed.

**FLOWERS OF SULPHUR** Used principally to control and prevent mildew on grapes, roses, melons, vines, etc. Lb., 10c; 10 lbs., 85c; 50 lbs., \$1.25; 100 lbs., \$5.25, f. o. b. Phoenix.

**PARIS GREEN** For grasshoppers, cut worms and tomato worms.  $\frac{1}{4}$  lb. pkg., 25c; 1 lb., 60c; 5 lbs., \$2.50. Write for quantity prices. Cannot be sent by mail.

**TREE TANGLEFOOT** (Paste). This is a sticky substance applied to the bark of trees to protect them from all climbing insects and also rabbits. It will prevent ants from entering the trees. One application is good for three or four months. Lb. can, 60c; 5 lbs., \$2.50; 10 lbs., \$4.75. Postage extra. Can be sent by mail.

**NICO GARDEN DUST** (12 oz. pkg., 40c) (5 lb. pkg., \$1.75) Cannot be mailed.

**NICO DUST NO. 10** 10% Black Leaf 40. (1 lb. pkg. 50c) (5 lb. pkg. \$1.75) (25 lb. steel drum \$5.00) (50 lb. steel drum \$9.25) (100 lb. steel drum \$17.00). Cannot be mailed.

**GARDEN VOLCK** Contains nicotine and soap. A complete spray for home gardener, controlling mealy bugs, scale, aphids, thrip, red spider. (3½ oz. 40c) (pt. \$1.00 (qt. \$1.50) (gal. \$4.20) Cannot be mailed.

The Above Prices F. O. B. Phoenix



# CYANO GAS

## IN RUST AND GRANULAR FORM

1-lb. pkg. ....	\$ .75
5-lb. can .....	2.50
25-lb. drum .....	8.50
100-lb. drum .....	21.00

f. o. b. Phoenix. Cannot be mailed.

**FLUOCIDE DUST** Non-arsenical Dust for Worms, Beetles. No. 33—Can be used on crops in place of arsenic with no resulting residues if not applied too close to harvest time. Kills alfalfa looper, cabbage worm, corn ear worm, tomato worm, caterpillars. (12 ozs. 30c) (5 lbs., 75c) (50 lbs., \$4.75) (100 lbs., \$9.00) f. o. b. Phoenix. May be mailed.

**LIEFGREEN'S ANT POISON** applied in powder form—very effective—1 lb., 25c; 5 lbs., \$1.00. Cannot be mailed.

### READY-FILLED ANTROL SET

The ready-filled Antrol Set consists of four patented glass feeders filled with Antrol. This set has the advantage over the regular set of being ready to use as purchased. Price 50c.



### REGULAR ANTROL SET

The regular Antrol set consists of four special glass containers and one 4-oz. bottle of syrup—enough for two fillings. Price 75c. Large Antrol set, 9 containers and syrup. Price \$1.25. Extra containers 10c each.

### ANTROL SYRUP

(4 oz. bot. 35c) (pint 85c). Cannot be mailed.

The Above Prices F. O. B. Phoenix.

## NURSERY AND FARM REQUISITES

**RAFFIA** We have natural Raffia by the pound or by the ton. Great quantities of it are used by Phoenix gardeners and citrus growers. We are headquarters. Best grade, lb., 50c. For larger quantities write for prices.

### Yucca Tree Protectors

For Protecting Citrus Trees  
f. o. b. Phoenix. Postage Extra

	Weight	Price	Price
	per	per	per
	1000	100	1000
12 in. ....	75	\$1.50	\$12.00
18 in. ....	125	1.75	15.00
24 in. ....	150	2.00	18.00

### Grafting Wax

¼ lb., 25c; ½ lb., 40c; 1 lb., 75c

### Pruning Compound

#### TREE SEAL

For covering fresh cuts or bruises on trees and is particularly valuable for citrus planting. Will aid nature in healing wounds without retarding the growth of the tree. 1 pint 40c; 1-qt. 60c; 1 gal. Can, \$1.75, f. o. b. Phoenix. May be sent by mail. Postage extra.

**BUDDING CLOTH**—Per square yard, 75c, prepaid.

### TARRED BINDER TWINE

for Balling Citrus trees. The tarred quality in the twine will eliminate retying in the Spring when the trees are moved from the Nursery to the grove. Price—5 pound balls, 85c each.

**BINDER TWINE**, Plain—75c each.

All of the above prices F. O. B. Phoenix. Prices subject to change without Notice.

We carry at all times a complete line of Sprayers and Dusters. Write for prices.

### Pot Labels

Plain	100	1,000
4 in. ....	\$ .35	\$2.50
6 in. ....	.40	3.25

### Tree Labels

Iron Wired	100	1,000
3½-inch .....	\$ .35	\$2.50

### Ex Pan Planting Pots

Made of tar paper for growing early vegetable plants for transplanting to the field.

2x2x4, per 100	\$ .75; per 1,000	\$4.75
3x3x4, per 100	\$1.00; per 1,000	\$6.50

f. o. b. Phoenix

### Macabee Gopher Trap

This is the most convenient gopher trap yet manufactured. It is easy to set, small and can be extended far down into the hole. Price, 25c; dozen, \$2.50.



## LIEFGREEN'S GUIDE FOR INSECT PESTS OF THE FARM, GARDEN AND HOME

The insects which injure plants in the garden or field have different methods of doing their damage, and it is necessary to know to which class an insect belongs before one can take remedial measures against it. Roughly there are two classes: the chewing and the sucking insects. When a person is suspicious that insects are injuring a plant it should be first examined to determine which type or class is present.



If actual portions of the plant are eaten, the chewing type of insect is guilty and one of the arsenical poisons should be used, such as Lead Arsenate, Paris Green, etc.

When no material part of the plant is removed, but the leaves or stems show speckled, whitish and brown or yellow areas, the sucking type is very apt to be injuring the plant. Insecticides such as Nicotine and pyrethrum sprays and dusts which kill by coming in contact with the body of the bugs are necessary to use for this type.

### COMMON INSECTS IN THE VEGETABLE GARDEN

#### On Beans:

**Mexican Bean Beetle:** A yellow beetle almost one-fourth of an inch long, with sixteen black spots on the back. Young work on the underside of the leaves. Use Sodium Fluosilicate and Lime.

**Thrips:** Very small, lice-like insects, yellow or brown or black. Work in the flowers or on the leaves, where they make shiny whitened areas. Use Tobacco or pyrethrum Compounds as a spray or dust when on leaves or flowers.

#### On Cabbage:

**Aphis:** A gray green aphid. Use a Nicotine or pyrethrum dust or spray.

**Cabbage Butterfly:** The worms of this butterfly that feed on cabbage and Cauliflower and related plants are soft, smooth, green caterpillars, that sometimes are especially injurious. Two pounds Lead Arsenate, two pounds Fish-oil Soap in 50 gallons of water is a recommended spray. Or dust with one pound Lead Arsenate mixed with five pounds hydrated Lime or 2 pounds of Dutox to 5 pounds of Tale. Do not use Dutox with Lime. We also recommend Fluocide—( a ready mixture).

**Diamond Black Moth**—A small worm about one-half inch long which feeds on Cabbage and Cauliflower, eating small holes in the leaves and spinning small white cocoons on the leaves. Spray with Black Leaf 40, using 1 pint to 75 gallons of water with 3 or 4 pounds fish oil soap for a spreader.

#### On Cantaloupes:

**The Twelve-spotted Cucumber Beetle:** A green insect one-fourth of an inch long with twelve black spots on the back. This insect damages all parts of the vine, the young live in the ground and are injurious to the roots. Control the adults with Sodium Fluosilicate and Lime.

**The Striped Cucumber Beetle:** This beetle is also about one-fourth of an inch in length, but is yellow with three black stripes. It feeds like the Twelve-spotted Cucumber Beetle and the control is the same. Heretofore, trying to kill them with the ordinary poisons has been unsuccessful; but the Sodium Compound or Dutox, when properly applied, will get nearly a complete kill.

**Aphis:** The melon aphid is a small, soft, green plant louse that is very injurious to cantaloupes. A fresh Nico-Dust of 2½ per cent Nicotine strength, or a pyrethrum compound Dust, carefully applied, is the best.

#### On Corn:

**Corn Ear Worm:** This is a very difficult pest to control, but good success is possible on sweet corn by dusting with Lead Arsenate every seven days when the corn is in the silk.

#### On Cucumbers:

The same pests attack cucumbers as cantaloupes, and the control measures are the same.



**On Lettuce:**

**Cutworms:** Several different kinds of cutworms attack lettuce. The majority of them can be controlled by the use of a poison bait especially formulated for cutworms.

**Grasshoppers:** For grasshoppers attacking lettuce, use the standard grasshopper poison bran bait. See us for formula.

**On Melons:**

The insects found attacking cantaloupes are also enemies of melons and the same methods and poisons should be used against them.

**On Onions:**

**Thrips:** This is the worst pest of onions. It is a very small, louse-like insect, light yellowish in color, that feeds down between the leaves causing them to turn white. It is difficult to control successfully, but very good results can be obtained by fumigating with Calcium Cyanide or Nico-Dust under long hoods that are dragged over the rows.

**On Peas:**

**Pea Aphis:** A large green plant louse. Use a contact insecticide when they first appear on the plants, repeating every ten days until controlled or all peas have been harvested.

**On Potatoes:**

**Colorado Potato Beetle:** A large beetle, yellow with black stripes. The young are orange yellow. Use 2 pounds Lead Arsenate in 50 gallons of water.

**On Spinach:**

**Flea Beetles:** These are small shiny black beetles that fly rapidly when disturbed. Because of the danger of poisoning, the arsenicals cannot be used, and it is necessary to treat with a very strong contact insecticide such as the Nicotine or Pyrethrum compounds.

## COMMON INSECTS IN THE FLOWER GARDEN

**ANTS:** The large red Harvester Ant will attack almost every living thing growing near to its nest, besides being troublesome because of its bite and sting. Calcium Cyanide is the best poison to use in the control of this pest. Use four to five tablespoonsful per nest, digging a hole in the center of the mound 16 to 18 inches deep and placing the Cyanide in the bottom and covering over tightly with soil, as the gas is lighter than air.

**APHIDS OR PLANT LICE:** There are many kinds of aphids that injure flowers in the garden. They may be reddish, green or black, and be with or without wings. Roses, Stock, and Sweet Peas are especially subject to attack. Control with a Nicotine or Pyrethrum Spray or Dust.

**CUTWORMS:** They attack many young plants in the Spring and early Summer. If the plant is cut off at the surface of the ground or the roots eaten, put out the cutworm bait, scattering it thinly along the rows affected. There are some cutworms, however, that climb the plants at night, eating the leaves. For this insect spray or dust with Lead Arsenate, Calcium Arsenate, Dutox or Fluocide.

**LACEWING BUG:** This is an especial pest of Hollyhocks. It works on the under sides of the leaves, turning them a brown or yellow color. Spray with a Nicotine or Pyrethrum Compound, taking pains to get the poison on the under side of the leaves.

**THRIPS:** This insect bothers roses, particularly in the Spring. Spray thoroughly with a Nicotine or Pyrethrum Spray.

**GRASSHOPPERS:** These are especially injurious to Zinnias in late Summer and Fall. Use the poison bran bait.

## COMMON INSECTS IN THE HOUSE

**ANTS:** For the small black or red ant that infests the house and gets into the refrigerator, sink, etc., bait by setting out Antrol. This has proved 100% effective where tried and is the cleanest and simplest of methods.

**COCKROACHES:** Spread Sodium Fluoride or Sodium Fluosilicate about where the roaches are in the habit of traveling. This will rid the house of them in less than a week.

**TERMITES:** For information on control call us or write to the State Entomologist, the University of Arizona or the County Agricultural Agent.



# LIEFGREEN'S MONTHLY PLANTING GUIDE

## FOR THE SALT RIVER VALLEY AND SIMILAR CLIMATES

For the colder sections of Arizona the time of planting should be determined by weather conditions. In Northern Arizona and in the higher altitudes most of the varieties listed here should be planted in the Spring, after all danger of frost.

### JANUARY PLANTING LIST

**VEGETABLE SEEDS**—Asparagus, Beets, Cabbage Plants, Carrots, Cauliflower Plants, Collards, Endive, Kale, Kohlrabi, Lettuce, Mustard, Onion Seed, Onion Sets, Parsley, Parsnips, Peas, Potatoes, Radishes, Rhubarb Roots, Spinach, Turnips, Strawberry Plants.

**FLOWER SEEDS**—African Daisy, Bachelor Button, Calendula, Calliopsis, Candytuft, Carnation, Centaurea, Cosmos, Coreopsis, Double Daisy, Gaillardia, Gypsophalia, Hollyhock, Larkspur, Linaria, Linum, Moon Vine, Mignonette, Nemophila, Nigella, Pansy, Petunia, Phlox, Pinks, Poppies, Shasta Daisy, Stocks, Snapdragon, Sweet Alyssum, Sweet Peas, Verbena, Venidium Fastuosum.

**BULBS**—Amaryllis, Canna, Calla Lily, Chinese Lily, Crocus, Daffodils, Freesias, Gladiolus, Jonquils, Hyacinths, Oxalis, Paper White Narcissus, Tulips, Ranunculus, Tuberoses.

**LAWN SEEDS**—Blue Grass, Rye Grass, White Dutch Clover.

**FIELD SEEDS**—Alfalfa, Barley, Oats, Rye, Wheat, Sweet Clover.

### FEBRUARY PLANTING LIST

**VEGETABLE PLANTS**—Asparagus Roots, Beets, Cabbage Plants, Carrots, Collards, Cress, Endive, Kale, Kohlrabi, Lettuce, Mustard, Okra, Onion Sets, Parsley, Parsnips, Peas, Peppers in Hot Beds, Irish Potatoes, Sweet Potatoes, Tubers in Beds, Radish, Salsify, Squash, Tomatoes, Turnips.

**VEGETABLE PLANTS**—Artichoke, Egg Plant, Pepper, Rhubarb, Tomato in the warmest sections.

**FLOWER SEEDS**—Asters, African Daisy, Bachelor Button, Balsam, Calendula, Carnation, Candytuft, Calliopsis, Centaurea, Coreopsis, Cosmos, Cockscomb, Evening Primrose, Four-o'clock, Gaillardia, Gypsophalia, Gerbera Geum, Hollyhocks, Helichrysum, Kochia, Lantana, Larkspur, Linaria, Lobelia, Marigold, Moon Vine, Morning Glory, Nemophila, Nigella, Nasturtium. Other Vine Seeds, Pansy, Petunia, Pinks, Scarlet Flax, Shasta Daisy, Statice, Snapdragon, Sweet Alyssum, Sweet Peas, Sweet Sultan, Tithonia Speciosa, Verbena, Venidium Fastuosum.

**BULBS**—Amaryllis, Caladium, Canna, Calla Lily, Chinese Lily, Gladiolus, Hyacinth, Madeira Vine, Tuberoses, Queen's Wreath.

**LAWN SEEDS**—Bermuda, Blue, Rye, White Dutch Clover.

**FIELD SEEDS**—Alfalfa, Barley, Oats, Sweet Clover, Wheat, Set out Fruit Trees, Rose Bushes and Shrubbery.

### MARCH PLANTING LIST

**VEGETABLE SEEDS**—Asparagus Roots, Beans, Beets, Carrots, Collards, Corn, Cress, Cucumbers, Egg Plant, Endive, Kale, Kohlrabi, Leek, Lettuce, Melons, Mustard, Okra, Onion Sets, Peas, Pepper, Peanuts, Irish Potatoes, Sweet Potatoes, Pumpkin, Radish, Salsify, Spinach, Squash, Tomato Seed.

**VEGETABLE PLANTS**—Artichoke, Egg Plant, Pepper, Tomato.

**FLOWER SEEDS**—All Vine Seeds, Balsam, Cockscomb, Cosmos, Four-o'Clocks, Gerbera Geum, Gaillardia, Gomphrenia, Helichrysum, Hollyhock, Kochia, Larkspur, Lantana, Marigold, Morning Glory, Nasturtium, Petunia, Portulaca, Scarlet Flax, Sweet Alyssum, Tithonia Speciosa, Verbena, Zinnia, Venidium Fastuosum.

**BULBS**—Canna, Caladium, Calla Lily, Gladiolus, Madeira Vine, Tuberoses, Queen's Wreath.

**LAWN SEEDS**—Bermuda Grass.

**FIELD SEEDS**—Alfalfa, Sweet Clover, Set out Fruit Trees, Rose Bushes and Shrubbery.

### APRIL PLANTING LIST

**VEGETABLE SEEDS**—Asparagus Roots, Beans, Beets, Celery, Corn, Cucumbers, Egg Plant, Endive, Kale, Kohlrabi, Leek, Melons, Okra, Pea-



nuts, Irish Potatoes in high altitudes, Sweet Potatoes, Pumpkin, Radish, Squash.

**VEGETABLE PLANTS**—Artichoke, Egg Plant, Pepper, Rhubarb, Tomato.

**FLOWER SEEDS**—African Marigold, Cosmos, Gaillardia, Gerbera Geum, Hollyhocks, Morning Glory, All Vine Seeds, Portulaca, Zinnia, Tithonia Speciosa.

**LAWN SEEDS**—Bermuda Grass.

**FIELD SEEDS**—Corn, Cowpeas, Feterita, Kaffir Corn, Millet, Milo Maize, Hegari, Sorghum, Sudan Grass, Bermuda Grass.

#### MAY AND JUNE PLANTING LIST

**VEGETABLE SEEDS**—Beets, Kale, Melons, Peanuts, Pumpkin, Sweet Potato Plants, Squash.

**FLOWER SEEDS**—African Marigold, Cosmos, Morning Glory, Portulaca, Tithonia Speciosa, Vine Seed, Zinnia.

**FIELD SEEDS**—Cowpeas, Feterita, Kaffir Corn, Millet, Milo Maize, Hegari, Sorghums, Sudan Grass, Bermuda Grass for lawn and pasture.

#### JULY PLANTING LIST

**VEGETABLE SEEDS**—Brussels Sprouts, Cabbage Seed, and Cauliflower Seeds in shaded bed, Casaba, Corn, Peanuts, Pumpkin, Squash.

**FLOWER SEEDS**—Cosmos, Portulaca, Morning Glory, Tithonia Speciosa, Vines, Zinnia.

**FIELD SEEDS**—Bermuda Grass, Corn, Cowpeas, Feterita, Kaffir Corn, Millet, Milo Maize, Pink Beans, Sorghums, Sudan Grass.

#### AUGUST PLANTING LIST

**VEGETABLE SEEDS**—Beans, Beets, Cabbage, Carrots, Cauliflower, Corn, Cucumber, Kale, Peas, Pumpkin, Squash, Turnips.

**FLOWER SEEDS**—Cosmos, Nasturtium, Phlox, Portulaca, Tithonia Speciosa, Zinnia.

**FIELD SEEDS**—Bermuda Grass, Corn, Cowpeas, Millet, Pink Beans, to August 10, Sudan Grass.

#### SEPTEMBER AND OCTOBER PLANTING LIST

**VEGETABLE SEEDS**—Beets, Cabbage, Carrots, Cauliflower, Collards, Cress, Endive, Garlic Sets, Herbs, Kale, Kohlrabi, Leek, Lettuce, Mustard, Onion Seed, Onion Sets, Parsley, Parsnips, Peas, Radish, Salsify, Spinach, Turnips.

**VEGETABLE PLANTS**—Cabbage and Cauliflower.

**FLOWER SEEDS**—African Daisy, Bachelor Button, Calendula, Candytuft, Carnation, Calliopsis, Centaurea, Clarkia, Columbine, Coreopsis, Delphinium, Daisies, Globe Amaranth, Gaillardia, Gypsophila Hollyhocks, Larkspur, Linaria, Mignonette, Moon Vine, Nemophila, Nicotiana, Nigella, Pansy, Petunia, Phlox, Pinks, Poppies, Scabiosa, Snapdragons, Stocks, Sweet Alyssum, Sweet Peas, Sweet William, Verbena, Venidium Fastuosom.

**LAWN SEEDS**—Bermuda Grass, Blue Grass, Rye Grass, White Clover, Poa Trevialis, Bent Grass, Red Top.

**FIELD SEEDS**—Alfalfa, Barley, Oats, Winter Rye, Wheat.

#### NOVEMBER AND DECEMBER PLANTING LIST

**VEGETABLE SEEDS**—Beets, Cabbage, Carrots, Cauliflower, Endive, Garlic Sets, Kale, Lettuce, Mustard, Onion Seed, Onion Sets, Parsley, Parsnips, Peas, Radish, Spinach, Turnips.

**VEGETABLE PLANTS**—Cabbage and Cauliflower.

**FLOWER SEEDS**—African Daisy, Calendula, Candytuft, Carnation, Calliopsis, Centaurea, Clarkia, Columbine, Coreopsis, Delphinium, Daisies, Globe Amaranth, Gaillardia, Gypsophila, Hollyhock, Larkspur, Linaria, Mignonette, Moon Vine, Nemophila, Nicotiana, Nigella, Pansy, Petunia, Phlox, Pinks, Poppies, Scabiosa, Snapdragon, Stocks, Sweet Peas, Verbena, Venidium Fastuosom.

**LAWN SEEDS**—Blue Grass, Rye Grass, White Clover, Poa Trevialis, Bent Grass, Red Top.

**BULBS**—Amaryllis, Calla Lily, Chinese Lily, Sol de Or (Yellow Chinese Lily) Daffodils, Freesias, Gladiolus, Hyacinths, Dutch Iris, Jonquils, Oxalis, Paper White Narcissus, Ranunculus, Tulips.

**FIELD SEEDS**—Alfalfa, Barley, Oats, Winter Rye, Wheat.



PLANTING CHART

Kind of Vegetable	Seeds or Roots Required for 100 Feet of Drill	One Acre	Distances for Plants to Stand				Depth of Planting	Ready for Use After Planting —About
			Rows Apart		Plants Apart in Rows			
			Horse Cultivation	Hand Cultivation				
Asparagus—Seed Roots.....	1 ounce.....	10 lbs.....	30 to 36 in.....	1 to 2 ft.....	3 in.....	1 in.....	2 years	
Beans, Dwarf.....	60 to 80 roots.....	80 to 125 lbs.....	3 to 5 ft.....	12 to 24 in.....	15 to 20 in.....	3 to 5 in.....	1 year	
“ Pole.....	1¼ lbs.....	40 lbs.....	30 to 36 in.....	18 to 24 in.....	2 in.....	1 to 3 in.....	42 to 75 days	
Beets.....	½ lb.....	6 lbs.....	3 to 4 ft.....	3 to 4 ft.....	12 in.....	1 to 3 in.....	72 to 90 days	
Brussels Sprouts.....	2 ounces.....	2 lbs.....	28 to 36 in.....	12 to 18 in.....	2 in.....	1 in.....	45 to 60 days	
Cabbage—Early.....	3 pkts.....	2 ounces.....	30 to 36 in.....	24 to 30 in.....	16 to 24 in.....	½ in.....	100 to 120 days	
“ Late.....	3 pkts.....	½ lb.....	30 to 36 in.....	24 to 30 in.....	12 to 18 in.....	½ in.....	90 to 110 days	
Carrot.....	3 pkts.....	½ lb.....	30 to 40 in.....	24 to 36 in.....	16 to 24 in.....	½ in.....	110 to 120 days	
Cauliflower.....	1 ounce.....	4 lbs.....	30 to 36 in.....	18 to 24 in.....	2 in.....	½ in.....	55 to 80 days	
Collards.....	3 pkts.....	2 ounces.....	30 to 36 in.....	24 to 30 in.....	14 to 18 in.....	½ in.....	120 to 150 days	
Corn—Sweet.....	½ lb.....	¼ lb.....	30 to 36 in.....	24 to 30 in.....	14 to 18 in.....	½ in.....	100 to 120 days	
Cress, Water.....	4 pkts.....	10 lbs.....	36 to 42 in.....	24 to 30 in.....	18 in.....	1 in.....	55 to 90 days	
Cucumber.....	½ ounce.....	2 lbs.....	Broadcast.....	30 to 36 in.....	Under water.....	Under water.....	60 to 70 days	
Egg Plant.....	2 pkts.....	¼ lb.....	4 to 6 ft.....	4 to 6 ft.....	4 every 3 ft.....	1 in.....	50 to 70 days	
Endive.....	1 ounce.....	2 lbs.....	30 to 36 in.....	24 to 30 in.....	18 in.....	½ in.....	125 to 140 days	
Horse Radish.....	70 roots.....	1 lb.....	30 to 40 in.....	24 to 30 in.....	20 in.....	½ in.....	100 days	
Kale, or Borecole.....	3 pkts.....	1 lb.....	30 to 36 in.....	18 to 24 in.....	18 in.....	3 to 4 in.....	1 year	
Kohl-rabi.....	3 pkts.....	1 lb.....	30 to 36 in.....	18 to 24 in.....	6 in.....	½ in.....	55 to 70 days	
Leek.....	½ ounce.....	4 lbs.....	30 to 36 in.....	14 to 20 in.....	4 in.....	½ in.....	120 to 150 days	
Lettuce.....	½ ounce.....	2 lbs.....	30 in.....	12 to 18 in.....	6 in.....	½ in.....	70 to 90 days	
Muskmelon.....	½ ounce.....	2 lbs.....	6 to 8 ft.....	6 to 8 ft.....	4 every 4 ft.....	1 in.....	85 to 150 days	
Watermelon.....	1 ounce.....	3 lbs.....	8 to 12 ft.....	8 to 12 ft.....	4 every 6 ft.....	1 in.....	100 to 130 days	
Mustard.....	3 pkts.....	1 lb.....	30 to 36 in.....	12 to 18 in.....	4 or 5 to ft.....	¼ in.....	60 to 90 days	
New Zealand Spinach.....	1 ounce.....	8 lbs.....	36 in.....	24 to 36 in.....	12 in.....	1 to 2 in.....	60 to 100 days	
Okra.....	2 ounces.....	8 lbs.....	4 to 5 ft.....	3 to 4 ft.....	24 in.....	1 in.....	90 to 140 days	
Onion—Seed.....	1 ounce.....	3 lbs.....	24 to 36 in.....	12 to 18 in.....	2 in.....	½ in.....	125 to 150 days	
“ Sets.....	1 qt. of sets.....	50 lbs.....	24 to 36 in.....	12 to 18 in.....	4 or 5 to ft.....	1 in.....	100 days	
Parsley.....	3 pkts.....	3 lbs.....	24 to 36 in.....	12 to 18 in.....	3 in.....	½ in.....	65 to 90 days	
Parsnip.....	½ ounce.....	3 lbs.....	30 to 46 in.....	18 to 24 in.....	2 in.....	1 in.....	130 days	
Peas.....	1 lb.....	60 lbs.....	3 to 4 ft.....	30 to 36 in.....	1 in.....	½ in.....	45 to 75 days	
Pepper.....	2 pkts.....	2 ounces.....	30 to 46 in.....	18 to 24 in.....	15 in.....	½ in.....	130 to 150 days	
Potatoes—Irish.....	5 lbs.....	16 bu.....	30 to 36 in.....	24 to 36 in.....	14 in.....	4 in.....	90 to 150 days	
“ Sweet.....	3 lbs. (or 75 slips).....	3 to 5 ft.....	3 to 5 ft.....	3 to 5 ft.....	14 in.....	3 in.....	150 days	



PLANTING CHART—Continued

Kind of Vegetable	Seeds or Roots Required for 100 Feet of Drill	One Acre	Distances for Plants to Stand				Depth of Planting	Ready for Use After Planting About
			Rows Apart		Plants Apart in Rows			
			Horse Cultivation	Hand Cultivation				
Pumpkin.....	½ ounce.....	4 lbs.....	8 to 12 ft.....	8 to 12 ft.....	4 every 6 ft.....	1 in.....	75 to	90 days
Radish.....	1 ounce.....	10 lbs.....	24 to 36 in.....	12 to 18 in.....	1 in.....	½ in.....	20 to	75 days
Rhubarb—Seeds.....	½ ounce.....		36 in.....	30 to 36 in.....	6 in.....	½ to 1 in.....	3 years	
Roots.....	33 roots.....			3 to 5 ft.....	3 in.....	2 to 3 in.....	1 year	
Ruta-baga.....	3 pkts.....	2 lbs.....	30 to 36 in.....	18 to 24 in.....	6 in.....	½ to 1 in.....	90 days	
Salsify.....	1 ounce.....	8 lbs.....	30 to 36 in.....	18 to 24 in.....	2 in.....	½ in.....	150 days	
Spinach.....	1 ounce.....	20 lbs.....	30 to 36 in.....	12 to 18 in.....	2 in.....	1 in.....	45 days is min.	
Squash—Summer.....	½ ounce.....	4 lbs.....	3 to 4 ft.....	3 to 4 ft.....	4 every 4 ft.....	1 in.....	65 to	70 days
Tomato.....	2 pkts.....	1½ ounces.....	3 to 5 ft.....	3 to 4 ft.....	3 to 4 ft.....	½ in.....	125 to	150 days
Turnip.....	1 ounce.....	1 lb. sown broad- cast 3 lbs.....	24 to 36 in.....	18 to 24 in.....	2 in.....	¼ in.....	45 to	90 days

NUMBER OF PLANTS TO AN ACRE

SET AT REGULAR DISTANCES APART

Distance apart	No. Plants	Distance apart	No. Plants	Distance apart	No. Plants
3 in. by 4 in.....	522,720	3 ft. by 3 ft.....	4,840	5 ft. by 5 ft.....	1,742
4 in. by 4 in.....	393,040	3½ ft. by 3½ ft.....	3,555	5½ ft. by 5½ ft.....	1,440
6 in. by 6 in.....	174,240	4 ft. by 1 ft.....	10,890	6 ft. by 6 ft.....	1,200
1 ft. by 1 ft.....	43,560	4 ft. by 2 ft.....	3,630	6½ ft. by 6½ ft.....	1,031
1½ ft. by 1½ ft.....	19,360	4 ft. by 4 ft.....	2,722	7 ft. by 7 ft.....	888
2 ft. by 1 ft.....	21,780	4½ ft. by 4½ ft.....	2,150	8 ft. by 8 ft.....	680
2 ft. by 2 ft.....	10,890	5 ft. by 1 ft.....	8,712	9 ft. by 9 ft.....	537
2½ ft. by 2½ ft.....	6,960	5 ft. by 2 ft.....	4,356	10 ft. by 10 ft.....	435
3 ft. by 1 ft.....	14,520	5 ft. by 3 ft.....	3,904	11 ft. by 11 ft.....	360
3 ft. by 2 ft.....	7,260	5 ft. by 4 ft.....	2,178	12 ft. by 12 ft.....	302

Rule—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of square feet (43,560), will give the number of plants to the acre.



# LIEFGREEN'S GIANT ZINNIA Dahlia Flowered



A photographic reproduction of the wonderful Dahlia flowered Zinnia. The large size, fullness of petals, extraordinary color range and keeping qualities of the flowers have all contributed to its popularity. It may well be called the Arizona Flower as it thrives exceedingly well in our climate. See page 37 for prices and description of the various colors.

---

For your information and guidance:

Refer to pages 44 and 45 for Liefgreen's Guide for Insect Pests.

Refer to pages 48 and 49 for Liefgreen's Planting Chart.

Refer to pages 46 and 47 for Liefgreen's Monthly Planting Guide.

---

**LIEFGREEN SEED CO.**

339 West Van Buren  
PHOENIX, ARIZONA